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School Principal Leadership and Special Education Knowledge

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SCHOOL PRINCIPAL LEADERSHIP AND SPECIAL EDUCATION KNOWLEDGE

A Dissertation Presented

by

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DEDICATION

This dissertation is dedicated, first and foremost, with love to my amazing wife Sue. She is the one who supported, encouraged, and guided my studies, all while also doing the real work while I was away playing student. This is entirely her achievement. It is also dedicated to my children, Robby and Molly, who I love and to whom I hope this is someday an inspiration. I thank my parents, Bob and Colleen, who, despite all evidence to the contrary, seemed to think I was pretty smart right from the beginning and who encouraged me to take my education as far as it could go. Lastly, this is dedicated to my late grandmother Avilda, who would have taken satisfaction from this achievement.

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ABSTRACT

SCHOOL PRINCIPAL LEADERSHIP AND SPECIAL EDUCATION KNOWLEDGE

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This study investigated the effects of special education background and demographic variables on the perceptions of leadership styles by public school principals with and without special education backgrounds in Massachusetts. Utilizing Q-sort methodology, principals sorted 47 statements reflective of transformational, instructional, transactional, and distributed leadership. Analysis found that the participants separated into two factor groups. The special education background of the participants did not influence the formation of the factors, and it was found that prior special education experience was not a predictor of subsequent leadership perceptions of principals. Instead, Factor A was composed of younger, less educated, less experienced principals in lower-performing schools who valued instructional leadership and school improvement in their leadership. Factor B was composed of older, more educated, more experienced, and more ethnically diverse principals who worked in higher-performing schools and who valued multiple leadership styles and high-level, whole-school leadership. A model was developed,

showing a process for how principals grow their expertise and evolve their leadership over the course of their leadership careers. This study demonstrates the importance of continued research into special education leadership and of how leadership is differentiated among schools with different levels of student performance.

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CHAPTER 1

SCHOOL LEADERSHIP AND THE ROLE OF THE PRINCIPAL

Introduction

The principal of a school has a great effect on the education of all students within that school, for good or for ill. Research has shown that how principals approach their position, and its ultimate impact on students, depends on their leadership style. Some styles have been shown to be more beneficial for students than others. One particularly vulnerable subsection of student populations are special education students. Indeed, they are so vulnerable that they are protected by laws specifically designed to safeguard their education. These laws promote collaboration, shared leadership, and inclusive planning – many of the same characteristics of the leadership styles which have been shown to have the most beneficial impact on outcomes for all student groups. This study seeks to discover the relationship between the knowledge and experience that principals have with special education and the tendency to possess these leadership styles. It is hypothesized that principals who have a special education background will have more developed progressive perceptions of their leadership styles and their impact on improved outcomes for their special education students. This connection would be useful in assisting the development of principals' special education skills and leadership.

Leadership

Frameworks for Analyzing Leadership

What is leadership? It is difficult to say. Leadership, like humor, is something that everyone can recognize and which can be expressed and shown in many different ways, but still is very difficult to precisely define (Rosch & Kusel, 2010). A review of research indicated no one clear definition of leadership, but rather many different ways of describing what makes leader effective.

A famous and effective way of examining leadership is through the use of Bolman and Deal's four frames of leadership (2008). A frame is a worldview or lens through which to view a problem or situation. Looking at an identical problem through different frames can lead to differing solutions, and this analysis can be very valuable in attempting to solve intractable, institutional problems.

The first frame posited by Bolman and Deal (2008) is the structural frame. The structural frame is based around organizational hierarchy, efficiency and procedure. This frame posits that it is the structures of an organization that directly impacts what happens in the workplace, and that structure "needs to be designed with an eye towards desired ends, the nature of the environment, the talents of the workforce, and the available resources" (Bolman & Deal, 2008, p. 59).

The second frame is the human resource frame. The human resource frame is built around the mutually dependent needs of organizations and people – both need the other in order to thrive. When organizations are built in such a way that people are fulfilled and find their work meaningful and satisfactory, then people will work hard and apply their talents to make the organization successful. The human

resource frame posits that organizations need to invest in employees to make them skilled and motivated in order to reap the benefits of that energized and talented workforce (Bolman & Deal, 2008).

The political frame views organizations as divided into camps, each having different values, fighting for resources, and engaging in bargaining and negotiation in an effort to promote its own best interests. Even though everyone in an organization may have the same goals – in the case of a public school, to educate students – different members of the organization may have different beliefs in how to attain that goal, what root problems are, and what good changes are. Individuals who share these beliefs group together to form coalitions who fight other, differing coalitions for money, control, and the direction of the organization.

The final frame is the symbolic frame. The symbolic frame deals with the vision and values of an organization, with heroes and stories, rituals and ceremonies, with culture (Bolman & Deal, 2008). A leader who utilizes the symbolic frame seeks to unite a staff using these inspirational methods. This frame shares characteristics with transformational leadership, which will be described later in this chapter.

Another scheme for analyzing leadership is put forth in Leithwood, Harris and Hopkins (2008) and Leithwood (2004). Adapted from research by Yukl (1989, in Leithwood, 2004 , Harris & Hopkins, 2008), the basic practices of leadership are divided into the following four categories, three generalized to all leadership and one specific to education:

1. Building vision and setting directions: establishing a shared purpose, group goals, and high expectations in order to increase motivation among colleagues
2. Understanding and developing people: building knowledge, skills, commitment, capacity, and persistence
3. Redesigning the organization: creating work conditions that allow employees to work up to their potential; also included managing conflict and team-building
4. Managing the teaching and learning program: staffing programs, providing teaching support, monitoring the teaching and learning (2008).

Leithwood (2004) and Leithwood, Harris and Hopkins (2008) stress that leaders have to possess the ability to use all of the above categories, but must alter the proportion of each that they utilize to specific leadership situations. This flexibility means that leaders have to understand that in some positions vision building may be the most important, but in other settings developing the staff needs to take priority (Leithwood et al, 2008). Leithwood, Louis, Anderson and Wahlstrom (2004) found that there were three basic functions of leadership in common across all organizations and even cultures: 1) leaders must set directions for the organization, 2) develop the people in the organization to be better able to fulfill their purposes, and 3) redesign the organization to make it more effective.

There is some evidence that leadership is dependent upon experience. Mumford, Marks, Connelly, Zaccaro, and Reiter-Palmon (2000) found that as leaders

rose in positions of responsibility and gained more experience, they concurrently gained more skills in a progressive, systematic fashion, implying that growth as a leader requires time to learn the necessary competencies. Leaders self-develop over time, through trial-and-error, reflection on experiences, and through observation of other leaders (Reichard & Johnson, 2011). Having prior experience in leadership, especially highly relevant experience, is a strong predictor of a leader's effectiveness (Avery, Tonidaniel, Griffith, & Quinones, 2003).

All the attention paid to leadership, without coming up with a true, agreed-upon definition or set of criteria, only shows how elusive it is to get to the core of what makes a good leader, that the "nature of effective… leadership still remains much more of a black box than we might like to think" (Leithwood & Jantzi, 2006, p. 202).

Leadership Styles

Though a definition of leadership itself remains elusive, the different ways in which people provide leadership to those with whom they work have been studied and delineated. The different styles of leadership, described in this section, show the variety in the approaches that different leaders can take as they pursue their goals.

Laissez-faire Leadership

The word 'laissez-faire' comes from the French and means 'allow to do' (Encyclopedia Brittanica, 2012). This term, traditionally applied to types of economics where there is a purposeful lack of interference and regulation of business, is also applied to a similar type of leadership marked by leaders who do not become actively involved in managing. This type of leadership leads to a lack of

contact between leaders and employees, which leads to less motivation and extra effort from the employees. It was proposed by Lewin, Lippitt & White (1939) as involving complete freedom for a group without leader participation. Laissez-faire leaders offer no feedback, interference or directive action (Webb, 2007).

A study of college leaders found that laissez-faire leadership styles had a negative relationship towards employee motivation end effort. "Therefore, leaders who do not actively engage with staff members are likely to demotivate their employees" (Webb, 2007, p. 64).

Transactional Leadership

Transactional leadership is based on a system of rewards and punishments; employees who do well are rewarded and those who fail are punished by the leader in charge. Sadler (2003) defined transactional leadership as "when managers take the initiative in offering some form of need satisfaction in return for something valued by employees, such as pay, promotion, improved job satisfaction or recognition" (p. 24). He felt that is was a prime function of management and that those who practiced it needed to understand the needs of employees so they can set proper rewards and that they needed to be able to set clear goals.

Transactional leadership can be passive or active. Passive leaders who practice this style are not proactive; they do not seek out potential problems and try to solve them but rather wait passively for failure and then punish the employees involved (passive management-by-exception). Active leaders who are transactional (active management-by-exception) constantly check working performance, but only to look for mistakes and take action against employees (Webb, 2007). This

management-by-exception leadership leads to continuation of the status quo and inspires no loyalty in employees (Bass, 1985). Transactional leadership has been considered needful in getting done the 'day to day' tasks by helping people realize what needs to be done, but it does not stimulate any improvements (Leithwood, 1992).

This type of leadership, though often disparaged in the literature, can offer success; Webb found that systems of reward can cause some increased motivation. However, both styles of management-by-exception lowered employee motivation (Webb, 2007). Bass (1985) felt that contingent-reward transactional leadership, where rewards are promised in exchange for positive performance, can be an effective strategy. He also said that, as compared with transformational leadership, that transactional is more concerned with efficiency in the work than with ideas. It has been found that transactional leadership works well in concert with other leadership skills. Transactional leadership, when combined with other leadership styles, can be effective for the day-to-day management and organizational needs of a school, and can help maintain a positive school environment (Pepper, 2010).

Transformational Leadership

Transformational leadership has been called a necessary, though not sufficient, part of a school leader's leadership technique (Leithwood, 2001).

Leithwood and Jantzi (2006) conducted a study on the effects of transformational teachers in English schools via statistical analysis of a survey answered by educators. Though the results, by admission of the authors, should be interpreted with caution due to the low response rate to the survey (though the

sample size was very large), they did show interesting results about the efficacy of transformational leadership.

The surveys showed that transformational leadership had a strong and direct effect on teachers' motivation and a weaker positive effect on their capacity. Transformational leadership also had a significant effect on teachers' classroom practice. The authors of the study concluded that transformational leadership has a direct link with increasing the likelihood that teachers will change their classroom practices and that leaders who wish to change classroom practices should practice this type of leadership (Leithwood & Jantzi, 2006).

Practitioners of transformational leadership show intensely personal leadership that seeks to inspire and improve an organization, can be widely distributed, and is not necessarily identified with official hierarchy. It was developed in the 1990s in reaction to the top-down, directive-based leadership styles (such as instructional leadership) which were popular in schools in the 1980s and is a people-focused type of leadership where the principal is more concerned with improving the staff to help them help students learn than they are with promoting a specific type of instruction (Hallinger 2003; Leithwood, 1992).

Transformational leadership is considered a shared or distributed type of leadership; leadership in this model may be considered an 'entity' spread out over an organization through multiple leadership sources rather than from a single person. It is explicitly non-transactional and does not seek to perpetuate the status quo. It seeks to indirectly improve results through creating second-order effects; for instance, improving the teachers' relationships with each other does not directly

improve student achievement, but it allows teachers more freedom to collaborate, which can have that positive effect. In this model, the principal has to be able to handle ambiguity and uncertainty and realize that change is difficult and uneven; this contrasts with a controlled, 'strong-leader' image of leadership (Hallinger, 2003). In fact, transformational leaders are "more concerned with the results than the process of how to get there" (Pepper, 2010, p. 46), as members of the organization use their own strengths to determine the best path towards achieving goals.

Hallinger (2003) compiled a model of transformational leadership based on his own work and Leithwood's conceptualization of transformational leadership. Under this model, transformational school leaders perform the following functions: defining the school mission by framing and communicating clear school goals, managing the instructional program by supervising and evaluating instruction, coordinating curriculum and monitoring student progress, and creating a positive school climate by protecting instructional time, promoting professional development, maintaining visibility, and providing incentives for teaching and learning (Hallinger, 2003).

The National Association of Elementary School Principals (NAESP) released a list of five dimensions of transformational leadership for principals (2008). According to the NAESP model, to be a transformational leader a principal must:

1. Look at data and analyze trends, insights, and gaps, also go beyond data analysis to promoting a shared vision for the school

2. Understand and practice new levels of public relations and marketing of school goals and achievements, coordinate with community agencies, and maintain a visible role in making a case for quality education
3. Create conditions and structures that enable continuous improvement for both the children and adults in the school community, particularly by giving staff the opportunities to participate in learning groups both inside and outside of school to further improve their educational practices
4. Be the lead learner in their schools, constantly reviewing research, predicting scenarios, and analyze data to ensure continuous improvement
5. Act as caring advocates for the whole child, supporting learning communities in which all children reach their highest potential

NAESP concludes that, to be effective, a principal must practice transformational leadership.

A study by Webb (2007) found that leaders who display transformational leadership characteristics caused a statistically significant increase in employee motivation towards giving extra effort. Webb found that her subjects were

> …more likely to be motivated by leaders who are energetic, possess high self-confidence, demonstrate power and assertiveness, recognize followers as individuals, consider their followers' unique abilities, needs, and ambitions, and who create environments that encourage workers to evaluate their attitudes, values, and their approached to problems and human relations. (p. 62)

In a second study, Webb (2009) found that leaders who are perceived to possess charisma and individual consideration (which are both transformational leadership characteristics) have employees with enhanced satisfaction, motivation, and perceptions of the leaders' effectiveness. She found that offering contingent rewards, an aspect of transactional leadership which can also found in other leadership styles, including transformational, was also associated with these positive results. She felt that current or prospective leaders should cultivate these characteristics in themselves to try and improve their practice.

Instructional Leadership

The concept of instructional leadership, a leadership style which is uniquely applicable to the field of education, first emerged in the 1980s as studies were conducted into the leadership of effective schools (Hallinger, 2003). With the advance of educational reform and school accountability, instructional leadership has had renewed interest from the educational community, and principals have increasingly seen themselves as accountable for instructional leadership regardless of how competent they are in practicing it (Hallinger, 2005). Instructional leadership has been defined as requiring "knowledge of the subject matter itself; knowledge of how students best learn that subject matter; and knowledge of how teachers learn to teach that subject matter. With this understanding, principals are equipped to act as instructional leaders" (Carver, 2012, p. 3).

Hallinger (2003), in a review of the history of the instructional leadership concept, identified the following basic characteristics of instructional leadership as they have emerged from research, as well as their originators:

Table 1.1: Foundations of Instructional Leadership Research

Characteristic	Source (from Hallinger, 2003, p. 330-332)
Focused on the role of the principal in coordinating, controlling and supervising curriculum and instruction	Bamberg & Andrews, 1990 Hallinger & Murphy, 1985
Originally came from studies of elementary schools; believed to be a needed role of an elementary principal	Edmonds, 1979 Leithwood & Montgomery, 1982
Based on studies of effective urban schools, instructional leaders are strong and directive	Edmonds, 1979 Hallinger & Murphy, 1986
Instructional leaders are hands-on, work directly with teachers, and combine expertise with charisma	Cuban, 1984 Hallinger & Murphy, 1986
Goal-oriented, focused on academic outcomes, with a narrow mission focused on these outcomes	Hallinger, 2003
Culture-builders, create high expectations for students and teachers	Mortimore, 1993 Purkey & Smith, 1984

Hallinger also worked out his own, more specific conceptualization of instructional leadership (Hallinger, 2003; Hallinger, 2005).

The first dimension of instructional leadership in this model is defining the school's mission. The principal must work with staff to create clear, academically-oriented goals and make sure they are known and supported in the school and community. The second dimension is managing the instructional program. The principal must supervise and evaluate instruction, oversee the evaluation of student progress, and coordinate the curriculum. In large schools the principal cannot do this alone and must delegate, but the principal must still be very involved in developing a school's instruction. The third and final dimension is creating a positive school climate, by coordinating professional development, being visible in

the school, and providing incentives for successful teaching and learning. (Note the similarities to the transformational leadership model above).

Instructional leadership seeks to change first-order variables, which directly impact the instruction and education of students (Hallinger, 2003; Leithwood, 1992). Some of the tools used in instructional leadership are walkthroughs, observations, coaching and mentoring, and planning staff development (Ashton & Duncan, 2012). Though this is the intention, it seems that most of the effectiveness of instructional leadership comes from its effects on culture and modeling rather than through direct supervision and evaluation of teaching, suggesting that of the three dimensions of instructional leadership, defining the school mission and creating a positive school climate have a greater effect than managing the instructional program (Hallinger, 2005).

Beauchamp and Parsons (2012) conducted case studies of five Canadian elementary schools where instructional leadership was taking place. They found that the principals shared their instructional leadership through communities of practice, where they were not micromanaged but allowed to work together. The instructional leaders themselves shared four personal characteristics: they believed that teachers could and would do good work, they turned professional development (led by outsiders) into professional learning (led by teachers), they set strong goals and expectations but stayed in the background when necessary, they valued the people involved in the school, and they focused on the positive to create a culture of success. The study concluded that these principals did their best instructional

leadership through teachers, by advocating for them and supporting them in their teaching.

Hallinger (2003) stresses that, though instructional leadership is an important function of a school leader, it cannot be the only leadership that a principal provides, and that each principal must tailor their specific type of instructional leadership to their specific school. Goff, Mavrogordato, and Goldring (2012), however, found that principals' instructional leadership style is independent of the preferences of their staff, meaning that many principals do not tailor their instructional leadership as Hallinger (2003) suggests. Hallinger (2003) also states that instructional leadership can be considered a transactional form of leadership which seeks to manage and control the staff to move toward the stated goal of school improvement.

Sahin (2011) found that instructional leadership had a significant impact on school culture. In a survey of special Curriculum Laboratory Schools in Turkey, which were specifically designed to implement progressive educational policies, he found a positive impact between instructional leadership and "all dimensions of the school culture" (Sahin, 2011, p. 1924). Specifically, giving feedback to teachers and identifying and delivering purpose were reported as high rated factors of good school instructional leadership.

A specific example of instructional leadership noted in the literature came from an elementary school teacher who had an activity center set up on the back of the room for students, but which the researcher never saw being used. When asked why, the teacher reported that, though she really liked to use that center, her

students had not made the expected progress in the basic academic areas, and her principal's expectation was that teachers would spend as much time as was necessary to achieve that progress. Therefore, time that could have been used at that center was instead pushed back into reading, writing, spelling and math instruction. It was clear that this teacher understood the school's mission, that the mission was focused on the academic development that was appropriate for this school's population, that achieving this mission was a priority for teachers who accepted it as legitimate and adjusted their instruction to achieve it, and that the mission was actively supported by the principal. This was considered a prime example of instructional leadership at work (Hallinger, 2005).

Distributed leadership

Distributed leadership, as defined by Elmore (2000), assumes that different people in a school system have different competencies and skills. Teachers, as well as principals and administrators, will simply be better at doing some things than they are at others, as a results of different training, experience, or personal preference. Spillane et al. (2004) stipulate that distribution of leadership is a given in all situations, and state that leaders, followers and the situation are the prerequisite for every leadership action and all leadership is therefore distributed.

To capitalize on this, leaders must give responsibility to whoever is best able to act on it, to create a culture where everyone pitches in with their best abilities to move the school forward. School leaders create this by fostering a culture where everyone wants to pitch in, where input from teachers and staff is welcome, and where people feel involved in decision-making.

> Distributed leadership, then, means multiple sources of guidance and direction, following the contours of expertise in an organization, made coherent through a common culture. It is the "glue" of a common task or goal—improvement of instruction—and a common frame of values for how to approach that task—culture—that keeps distributed leadership from becoming another version of loose coupling. (Elmore, 2000)

'Loose coupling' is Elmore's term for an old style of school administration, where administrative actions were not directly connected, or 'coupled,' to in-class instruction. Under this old model administrators did many organizational things and made noises about change but did not do anything to really alter classroom teaching, which remained completely independent for the teacher. Elmore's solution to the challenges of school reform and accountability is that principals and other school leaders should directly pursue instructional change through distributed leadership.

Other research has looked into the effects of distributed leadership in practice. A study conducted in Canada on the results of distributed leadership on teacher morale highlights some of the benefits of this style (Sheppard, Hurley & Dibbon, 2010). The researchers had been concerned that distributed leadership (which they called 'inclusive leadership'), since it involved the staff in leadership roles, would increase staff stress by increasing their responsibilities. By surveying teachers and then statistically analyzing the results, they found this was not the case.

Sheppard, Hurley and Dibbon (2010) analyzed the survey results against both transformational leadership and distributed leadership with regards to teacher morale and teacher enthusiasm. They found that transformational leadership had

significant positive effects on both, .10 on morale and .12 on enthusiasm. Distributed leadership has much larger positive effects in morale and enthusiasm, at .38 and .26 respectively. The researchers concluded that, since distributed leadership increases teacher morale and enthusiasm, that not only can it not be the cause of additional stress but rather that it positively affects their attitude towards their work (2010).

Related to distributed leadership is collaborative leadership. It is similar in that the leadership is not concentrated in one person, but is even more decentralized, creating "an environment where principals, the superintendent, bus drivers, cooks, custodians, paraprofessionals, and teachers" work together to create change in the school environment (Maxfield & Klocko, 2010). A mixed-methods study of one school district found that collaborative leadership, like other types described in this paper, requires a common vision and strong professional development preparation for the staff to be able to participate in such leadership. Trust among the staff and stakeholders is essential. The researchers recommend that schools have strong communication and have institutional policies that support collaborative leadership (Maxfield & Klocko, 2010). Hallinger and Heck (2010b) found that collaborative leadership has an indirect positive effect on student academic growth, via building academic capacity in schools. They believe that collaborative leadership helps identify and develop solutions to school-specific problems over time, which indirectly leads to better student outcomes.

Towards a Combined Approach

The previous reviews of leadership styles above have clearly shown that many of them have effective portions, or that they even overlap in some aspects. Is

there a combined approach to leadership? Instructional and transformational leadership have many aspects in common (Hallinger, 2003). Both want to create a shared sense of purpose, high expectations, a reward structure for progress toward goals, providing a wide range of activities for staff development, and having a visible principal modeling their expectations for the school. They vary in the focus on first or second order variables and principal control versus staff empowerment techniques. Hallinger argues that principals must utilize both strategies at times; they must be empowered to act and hold staff to high standards, but they also must be strong enough to share responsibilities and build collaborative relationships with staff. How much of each leadership technique they use must depend on context and setting in their individual school.

Pepper (2010) advocates for a combining of the transformational and transactional leadership styles. In this synthesis, leaders use the transformational aspects of their leadership to help faculty collaborate and make decisions towards improving instruction and curriculum, to take ownership of changes, and to help build school culture. At the same time, the leaders use transactional leadership to maintain an orderly school with high expectations for students and staff. Similarly, Coleman (2011) wrote that a blended model of leadership, combining aspects of different styles including collaborative, distributed, and political, was the most appropriate for the school setting. Webb (2007) found that going to the extremes of any style both had the same effect; a style which was too hands-off (laissez-faire) and a style of constant attention and correction (transactional) both led to decreased motivation among employees.

Also, there is some belief that the differences between the leadership styles may be overstated in general. Leithwood et al (2004) cautioned against what they referred to as "leadership by adjective" (p. 6). They believed that all the leadership styles mentioned in this section were in pursuit of the same leadership and school improvement goals, that that too much can be made of the style labels while the commonalties can be lost.

With the exception of instructional leadership, all the leadership styles discussed in this section could be applied broadly to any type of management, in business, government, or any other place where leadership is needed. In the next section, we will firmly ground these theories in schools, where they achieve their meaning as they either help or hinder the education of special needs students. The most crucial – most cited in the literature and most prevalent in schools – are distributed, instructional, transformational, and laissez-faire/transactional. These leadership styles are important and worth of greater study.

CHAPTER 2

PRINCIPALS' ROLE IN THE LEADING AND ADMINISTRATION OF SPECIAL EDUCATION

School Leadership

Leadership in the context of education is an important topic with direct results on student outcomes. In fact, it has been stated that only classroom instruction has a greater effect on student learning than school leadership (Leithwood et al, 2008).

This statement is made in a review of literature and based on several pieces of evidence: case studies, quantitative studies of the effects of leadership, analysis of the effects of specific leadership practices, research on the effects of leadership on student engagement, and documentation of how an unplanned change in leadership can dramatically injure a school's progress (2008). Another review of literature found that school leadership had the second-greatest impact on student learning of all school-based factors, behind only classroom instruction (Leithwood, Louis, Anderson & Wahlstrom, 2004). These authors found that school leadership impacts students indirectly, since leaders do not have much actual contact with most of their students, but that the effect is measurable and significant. Some of the activities which have that indirect impact on student outcomes are setting the school mission, including teachers in decision making, building relationships with parents, arranging professional development, and creating alignment with goals, programs, policies, and development (2004).

Even though leadership has an impact on student outcomes, is has been difficult to construct a solid scientific account of what good school leadership is (Spillane, Halverson, & Diamond, 2004). Those authors propose a definition of school leadership as:

> ...the identification, acquisition, allocation, co-ordination, and use of the social, material, and cultural resources necessary to establish to conditions of the possibility of teaching and learning. Leadership involves mobilizing school personnel and clients to notice, face, and take on the tasks of changing instruction as well as harnessing and mobilizing the resources needed to support the transformation of teaching and learning. (2004, p. 11-12).

It is important to more closely examine leadership, specifically in the school environment, knowing how much influence it can have on pupil outcomes. Elmore (2000) considered school leadership to be an integral component in an age of educational reform, where leaders would have to shift from mainly administrative tasks and shielding teachers from outside intrusion to acting as change agents actively working to change instructional practices in their schools. Since accountability practices such as No Child Left Behind have taken effect, other aspects of leadership need to take a back seat to what truly effects student outcomes: classroom instruction. "The skills and knowledge that matter in leadership, under this definition, are those that can be connected to, or lead directly to, the improvement of instruction and student performance. Standards-based reform forces this question. It makes leadership instrumental to improvement" (Elmore, 2000, p. 14). Elmore feels that this instructional improvement is best accomplished through use of distributed leadership.

In addition to the theoretical work outlined above, there are professional standards for school leadership that have been formulated to guide school leaders. The ISLCC 2008 standards adopted by the National Policy Board for Educational Administration (2008) has six standards which school leaders must follow to ensure the success of their students. These standards are to promote:

> the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning… the sustaining a school culture and instructional program… the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment… the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources… the success of every student by acting with integrity, fairness, and in an ethical manner… the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context" (National Policy Board for Education Administration, 2008, 14-15).

These standards cover a wide variety of areas over which school leadership exercises influence: vision, culture, collaboration, ethics, and knowledge. The ELCC District-Level Educational Leadership Program Standards (National Policy Board for Education Administration, 2011), which were based on the earlier ISLCC standards and were published by the same organization, echo the standards already cited while also adding that district leaders need to have a substantial mentored learning experience, recognizing the benefits of experience and professional growth which will come up again later in this paper.

Special Education Leadership

Unlike principals, superintendents, and general leadership, there is little research on the specific skills required of special education leaders. "The question about what makes the administration of special education *special* has not been explicitly addressed… there is indeed something special about the way educators trained in the administration of special education deliver services to students who have disabilities and support instructional staff" (Boscardin, 2007, p.189). Billingsley (2007) also notes that there has been no study that specifically investigates special educator teacher leaders.

There are components of special education law and practice that apply directly to leadership in this area. The response to intervention (RTI) methodology – which is used (among other things) to diagnose specific learning disabilities – involves goal-setting, specific interventions, and data collection to monitor progress. Special education leaders experienced in this system are uniquely able to utilize it administratively, implementing and monitoring benchmarks to improve and reform school practices and outcomes (Boscardin, 2007). It is perhaps because of this skill in problem solving and advocating for a vulnerable population that special educators in general tend to have a sophisticated understanding of the organizational structure and politics in their districts (York-Barr, Sommerness, Duke, & Ghere, 2005).

The Individuals with Disabilities Education Act (IDEA), the guiding law behind all special education, has for nearly 35 years insisted on collaboration, dialogue, and mutual problem solving in order to advance the education of disabled

youth. These are characteristics which directly impact inter-staff relations and administrative problem-solving; it stands to reason, in the absence of data, that these characteristics may be both more prevalent and more important to leaders working in the field of special education than those in other education leadership positions.

Administrators of special education also have several other unique challenges to overcome in their leadership positions. Special educators, besides serving a vulnerable population, *are* a vulnerable population. Special educators tend to either become general educators or leave teaching altogether (McLesky, Tyler, & Flippin, 2004), they are burdened with "bureaucratic and compliance tasks" that interfere with their bedrock teaching duties (Billingsley, 2007, p.171), and 1/3 of new special educators who have access to mentoring programs find them not to be helpful (Billingsley, Carlson, & Klein, 2004). Special education is a high-stress field and special education leaders need to be able to guide their staffs through these obstacles. Special education teachers in general need to be recognized, validated, and supported, and this in turn can lead to improved services and outcomes for students (York-Barr, Ghere, & Sommerness, 2003). In order to try and keep special education teachers from leaving the profession, special education administrators should address the following important factors: a vision of the purposes and goals of the special education program and communication to express that vision, availability of resources and the burden of paperwork, professional development, and the role of the school principal in providing support to special educators (Lashley & Boscordin, 2003).

A study of four schools in England with special education needs coordinators found that there was inconsistency in their roles and responsibilities from school to school (Szwed, 2007). At some schools the coordinators were included in senior managements teams and impacting school-wide policy, while at other schools they were left off the team. The special needs coordinators who were on the management teams were considered 'pivotal' consultants helping to guide the school; the ones left off the teams were merely regarded as 'middle managers' who implemented school leaders' decisions but could not further collaborative aims within the schools. Szwed (2007) called for the role of coordinator be refined to be explicitly a senior manager and partner in leading the school. She also found agreement in the types of leadership needed for this type of position. Special needs leaders needed to be working towards building a shared vision among the staff, building a cohesive team among the staff, and be more concerned with cultural than structural change.

A research study on school-parent conflict in special education, which was based on interviews with parents and employees in two school districts, a document review, and observations of meetings, found that leadership can play a large role in causing discord (Mueller, Singer & Draper, 2008). A special education director in the first of the two districts who was described as overworked, unresponsive and inconsistent was considered a prime cause of relationship problems with parents. The parents felt like they had to threaten to sue to get services, and the staff felt that parents who made threats always got what they wanted. When the district replaced that director with a new leader who pursued mediation and collaboration with parents, restructured the department, hired new teachers and service providers

who supported her vision, and restructured the budget to be more effective, relationships improved.

In the second school district, the position of special education director was not a full-time job, but rather was combined with that of a principal, who had to run a school as well as coordinate special education services for an entire district. This did not work; the director was not able to be a proactive leader, only reactive, 'putting out fires.' Transitioning to a full-time special education director who was able to take the time to examine district practices, hire new staff, and build partnerships with parents and local agencies led to an improvement in overall special education services for the district.

In their analysis, the authors of the study state that "the role of the new special education director at both districts was pivotal to the districts' success" (Mueller, Singer & Draper, 2008, p. 222). They conclude that having a strong leader at the head of special education, who can be proactive instead of reactive, is essential.

"Special education administration is located at the intersection of the disciplines of special education, general education, and educational administration" (Lashley & Boscardin, 2003, p. 4). While historically special education administrators have come from a background exclusively of special education knowledge, education reform and accountability for students with special needs students have required special education administrators to become experts in regular education administration and general education techniques, in addition to

working collaboratively with other professionals in the world of education (Lashley & Boscardin, 2003).

Lashley & Boscardin (2003) report that there are many vacant special education administration positions and many that are filled with administrators who lack full certification as special education administrators. They believe that there is a shortage of qualified administrators to take those positions, and that this is reflective of a concurrent shortage of special education teachers who could potentially become special education administrators

Role of the Principal

What is the role of a principal? "Various images of school principals' work permeate the literature including 'brief encounters', 'fire-fighting', 'lone ranger', and 'administration-bound'" (Spillane & Hunt, 2010, p. 294). According to the National Association of Elementary School Principals (2008),

> The role of principal continues to become more complex and challenging. Traditional leaders may have considered their jobs to be solely the managers of schools. But the current social and educational context—which combines high-stakes accountability with the high ideals of supporting social, physical and emotional needs of children— demands that principals demonstrate the vision, courage and skill to lead and advocate for effective learning communities in which all students—and adults—reach their highest potential. Every action in the school must support student learning, and all resources must be used wisely and efficiently to support the essential core of instruction. Yet a principal's job is much more than operational. (p. 2)

The role of the principal has changed over time; in the 1970s it was to handle student discipline and be a building manager (DiPaola & Walter-Thomas, 2003) and, as has been stated, different leadership needs and styles came into vogue during the 1980s (instructional leadership) and 1990s (transformational leadership). Spillane

and Hunt (2010) conducted a mixed-methods study (interviews, observations, questionnaires) of 38 principals to determine exactly what it is that principals do on a day-to-day basis in the modern era of education. For the entire group of principals, 22% of time was spent on average on curriculum and instruction; the number increased to 30% if school-improvement planning was included in this category. 16% of the curriculum and instruction time was spent on reviewing student work, data, and standardized testing. 3% of the principals' time was spent on activities termed 'teaching-related' such as classroom observations or reviewing lesson plans. Over 50% of principals' time was spent on administrative tasks. In what was a contrast to a 'lone-ranger' image of the principal, the subjects of the study spent 42% of their time in collaborative activities (with teachers, specialists, assistant principals, etc). The principals reported that they sat in on activities which they were not leading 36% of the time, and only led activities alone 22% of the time. Principals were also not determined to be constantly shifting focus and running around to put out fires, as the average length of each of their tasks was a robust 29 minutes (Spillane & Hunt, 2010).

That data was the aggregate of the entire sample of principals. In further data analysis, Spillane and Hunt (2010) found patterns in the practices of different principals and were able to place them in three groups.

'Administration-oriented' principals spend nearly 70% of their time managing administrative tasks such as personnel, budgets, and schedules. They spent only 20% of their time on curriculum and instruction. They tended to co-lead activities (47% of their activities), especially with assistant principals, with whom

they spent more time than principals in the other two groups. They also delegated many tasks to assistant principals, who tended to lead tasks where the principal was not present. They spent 8% of their time on fostering relationships.

The second group of principals was 'solo practitioners.' They spent only 32% of the time co-leading, and led alone 27% of the time. They spend more time on activities led by non-teachers than principals in the other groups. They spent 67% of their time on administrative-type tasks, and spent 9% of their time on their own professional development, more than the other groups. When they did co-lead, it was most often with subject-area specialists. They spent 5% of their time on fostering relationships.

The third group was 'people-centered practitioners.' These principals spent a much larger portion of their time on fostering relationships – 24%. They spent only 36% of their time on administrative tasks, and devote more time to curriculum and instruction tasks (33%). They spent more time than the other groups on planning professional development, working with parents and the community, and co-led 50% of their activities (Spillane & Hunt, 2010).

It is reasonable to ask how principals impact student learning since they do not engage in direct instruction in the classroom; the answer is indirectly. Principals occupy a 'middle management' position below superintendents but above teachers, and their authority to directly command is very limited (Hallinger, 2003). Despite this, principals can and do make a difference in the outcomes of their schools; principals can foster collaboration among teachers, for instance, which can lead to

improved instruction, which can lead to improved student performance (Leithwood, 2004).

Leadership style plays into this; principal leadership style affects teacher job satisfaction (Korkmaz, 2007). Teachers who report that their leaders use the transformational leadership style also report a high level of job satisfaction, while the reverse is true of transactional leadership. In fact, teachers who are on the verge of quitting may change their mind and decide to stay when a new principal with a transformational leadership style enters the school (Korkmaz, 2007).

Principals' leadership styles have been called into greater scrutiny as a result of reform movements such as the No Child Left Behind law (Pepper, 2010). "A principal's ability to skillfully balance transformational and transactional leadership styles will best position a school to accomplish the goals set forth in NCLB while also continuing to focus on individual student needs for academic success" (2010, p. 43). Pepper believes that principals must not allow the pressure of high-stakes testing to drive them into authoritarian leadership styles, but instead must combine the strong vision and collaboration of transformational leadership with the clear expectations and attention to organizational process of transactional leadership to keep schools moving towards their federally-set goals (2010).

Using Crane's (2007) model of business leadership, Pepper (2010) assigned principals three different roles of leadership which they must perform. The first is Role Model. Principals must lead by example, maintain focus on expectations, facilitate shared leadership, and help establish the school atmosphere. The second role is that of Manager. Principals must also plan, organize, and motivate the school,

typically using transactional means. In this model, the transactional leadership used in the Manager role enables the principal to act in a transformational way in the Role Model aspect of their leadership. The third role is Leader, where the principal is a visionary, facilitator and coach. In this role the principal establishes goals and vision for the school, and assists staff in developing and implementing the best instructional strategies (2010).

Principals can also affect outcomes for students by 'inspiring group purpose' – making teachers work as a team towards a common goal (Walker & Slear, 2011). Principals need to have strong communication skills with their teachers; "teachers consistently reported that that communication about school issues was valued and led to enhanced efficacy in their work with students" (Walker & Slear, 2011, p. 57).

Holland (2008) conducted a qualitative study on principals impacting novice teachers, using interviews with seven principals to determine how principal leadership impacts new teachers. All seven principals were part of a study on collaborative leadership and school reform.

The principals in this study disagreed on how much direct help a new teacher needed from a principal; some believed that teachers received more help from their assignment mentor and colleagues, while other believed that the direct assistance from collaboration with a principal was important, though still in unison with a mentor. They were in agreement that direct observations of a teacher, followed by feedback and a conversation, were a very important component of principal leadership for new teachers. The principals also thought it was important to provide

the teachers with individualized positive feedback and recognition, called ‘strokes’ in the context of the article.

In her analysis, Holland (2008) finds it important that principals delegate many responsibilities for new teachers to mentors, and that much of the direct contact comes through observations which are bureaucratically mandated as part of the evaluation process.

Another qualitative research article was based on interviews with seven ‘superstar’ principals and came up with nine leadership characteristics and behaviors (Streshly & Gray, 2008).

Table 2.1: ***Streshly and Gray's Nine Characteristics of Superstar Principals (2008, p.119-121)***

Characteristic	Description
Unwavering Resolve	"Relentless, aggressive and continually involved with the primary mission of the school" (119)
Compelling Modesty	Pass on credit for achievements, accept blame for failures
Duality of Professional Will and Personal Humility	"Humble, yet willing to stand firm against destructive challenges" (120)
A Culture of Discipline	Focus on student achievement and teacher responsibility; fostered high expectations
"First Who… Then What" Approach	Always sought the correct personnel for their schools
Hedgehog Concept	Focus on one primary mission (E.g., reading instruction)
Confront the Brutal Facts	Analyze achievement data and work with the results, do no not hide shortcomings but work to improve them
Ambition for the Success of the School	Put time into professional development and leadership succession (after they leave)
Ability to Build Relationships	With teachers, students, parents, and the community and between those groups as well (Students and teacher, parents and teachers)

Fullan (2002), by contrast, compiled a different list of five essential characteristics that principles require to be instructional leaders and change agents:

Moral Purpose: social responsibility to the staff and students, a moral calling to improve the lives of students, caring about improving lives in all district schools, not just their own

Understanding Change: the ability to not just desire change and have good ideas, but to be able to implement is successfully by helping others, supporting the staff, working with doubters, and paying attention to school culture change

Improving Relationships: Using emotional intelligence to build relationships and teams

Knowledge Creation and Sharing: Be the leading learner in the school, and filter and share information so that it is useful and inspiring to teachers, encourage action research amongst the staff

Coherence Making: Use a strong vision – student improvement – to filter the previous four principles to always stay on a coherent message of student improvement and not overload the staff.

Fullan (2002) acknowledges that this is a tall order for a principal to fill, and has suggestions on how to develop and sustain such leaders in schools. He would like principals to learn in context, meaning use the profession as a laboratory and use everyday experiences as learning opportunities to develop these skills. Succession of departing principals is also important, as it was in Streshley and Gray (2008), as principals need to cultivate leaders at different levels in their schools so that new leaders are prepared to take over and continue the mission. Fullan (2002) also believes that, since principals tend to be former teachers, that improving teacher performance will lead to better principals in the future.

Brenninkmeyer and Spillane (2008) divided a sample of 36 principals into two groups, expert and typical, based on a survey completed by their staffs over several years. Expert principals were those whose performance in leadership queries on those surveys had improved over time; typical principals had flat or declining results over time. They then presented the principals with problem-

solving scenarios and analyzed the responses to determine if expert and typical principals solved problems any differently.

The results showed that typical principals tended to talk about constraints, possible consequences for themselves, and discuss anecdotes about unsuccessful parts of their careers. Expert principals, by contrast, leaned towards data gathering, planning an approach, and delegating. The authors suggest that typical or novice principals can be explicitly taught new problem-solving processes that would make them more effective leaders (Brenninkmeyer & Spillane, 2008).

The effect of a principal who applies appropriate leadership can be self-reinforcing. When a school has strong collaborative leadership, it increases the capacity of the school, which leads to improved student outcomes, which then leads to the collaborative leadership model becoming stronger and more active in the school. Good school-based leadership, as this 'feedback loop' repeats over time, has an increasingly strong effect in the school (Hallinger & Heck, 2010a).

A study conducted by Portin, Schneider, DeArmond and Gundlach (2003), entitled *Making Sense of Leading Schools: A Study of the School Principalship,* aimed to find the core roles that principals perform. To discover this, the researchers visited 21 schools spread gradewise across elementary, middle, high, and K-12 schools and administratively across traditional public, private, magnet, and charter schools. In those schools the researchers did their main data gathering by conducting interviews with the principals, but they also interviewed assistant principals, teacher leaders, department heads, and teachers.

One core aspect of the job of being a principal was analyzing the problems of a school and developing solutions or, as the study framed it, "principal as diagnostician" (Portin et al, 2003, p. 9). Two schools with problems that look similar from the outside can have very different root causes with in the school; the principal has to determine exactly what the issue is and the appropriate way to go about correcting it. Some problems that needed to be approached with a diagnostic lens include school culture, facilities, student discipline and demographic issues such as poverty and high mobility. Principals should consider, whenever possible, available data in their school in order to plan out their approach to problem solving, but even in crisis principals need to consider the long-term goals and needs of the school as they deal with in-the-moment solutions. A snap decision that does not conform to the stated goals of the school and principal "sends a signal that the goals and commitments are, if not irrelevant, perhaps at best contingent" (Portin et al, 2003, p. 13).

The study also identified seven critical school functions of principals and described the actions they represented as follows (the following is a verbatim reproduction of a chart from the study):

Table 2.2: Critical Functions of Principals (Portin et al, 2003, p. 18)

Critical Function	Action
Instructional Leadership	Assuring quality of instruction, modeling teaching practice, supervising curriculum, and assuring quality of teaching resources.
Cultural Leadership	Tending to the symbolic resources of the school (e.g., its traditions, climate, and history).
Managerial Leadership	Tending to the operations of the school (e.g., its budget, schedule, facilities, safety and security, and transportation).
Human Resources Leadership	Recruiting, hiring, firing, inducting, and mentoring teachers and administrators; developing leadership capacity and professional development opportunities.
Strategic Leadership	Promoting a vision, mission, goals, and developing a means to reach them.
External Development Leadership	Representing the school in the community, developing capital, public relations, recruiting students, buffering and mediating external interests, and advocating for the school's interests.
Micropolitical Leadership	Buffering and mediating internal interests, maximizing resources (financial and human).

Although these seven dimensions did reveal themselves, it would be a mistake to consider them completely separate entities which only occur in succession, one at a time (Portin et al, 2003). Decisions made by a principal can and do involve multiple varieties of these types of leadership all at once, and each needs to be considered as the leadership decision is made. Which leadership dimensions come most frequently into play for a specific principal depends on contextual factors; both the context of the school and its needs and the principal and his or her experience and expertise influence that allocation of leadership interest.

All of the seven leadership dimensions will need to be performed within the school at some point; however, it may not have to be the principal themselves that

performs them. Another part of the principalship as defined by Portin, Schneider, DeArmond and Gundlach is delegating some of these leadership responsibilities in order to make sure that they are all fulfilled (2003). The study found that there are leaders by position – principals, assistant principals, department heads, and others who are described as leaders by the definition of the job – and de facto leaders, people who influence the direction and performance of the school regardless of their actual job title. How much of the leadership a principal shares is part of each individual's style. Some principals are 'one-man bands,' who keep all seven areas clustered around themselves and share with positional or de facto leaders as minimally as possible. Other are 'jazz band leaders,' where the principal lays down the theme that they want the whole school to follow, but they choose only a few to keep entirely to themselves and delegate others to different administrators and teacher. The most distributed type of leadership found in the study was called 'the principal as orchestra conductor.' "Here the principal is more akin to an orchestra conductor – playing nothing himself, but making sure the many individual parts are expertly performed, while harmonizing and working together smoothly" (Portin et al, 2003, p. 26). These principals act more in the vein of traditional superintendents, focusing on strategy and external politics, while still keeping tabs on the other functions and intervening as necessary. The authors caution that this style is not the same as leadership abdication; the orchestra leader principal did not abandon his responsibilities and still kept in touch and followed up with each of the necessary leadership functions.

The study found that, specifically for instructional leadership, in particular, it was necessary to be distributed based simply on the size of the task and the amount of time available to it. "Trust but verify" (Portin el al, 2003, p. 30) was a policy of these principals – allow other people to be instructional leaders but make sure that it is working and intervene if necessary.

Clearly, principals have a great deal of impact on all students in their schools. In the next chapter, the focus will shift to how principals relate to a specific, and specifically vulnerable, population in their schools: students with disabilities. There is an additional set of skills and competencies required of principals to ensure that this population achieves to their educational potential.

Principals' Role in the Leading and Administration of Special Education

Principals play an important role in the lives and education of special needs students (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Hoppey & McLeskey, 2013). "In sum, good principals are the best hope that students with disabilities and others at risk for school failure have for academic success in this NCLB era" (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004, p. 7). These authors call for principals to be prepared to handle special education via comprehensive preparation programs which include a strong special needs theory and law component, and that they work with in-district resources to help them learn more on the job.

"Administrators who clearly understand the needs of students with disabilities, IDEA, and the instructional challenges that educators who work with students with disabilities face are better prepared to provide appropriate support"

(DiPaola & Walther-Thomas, 2003, p. 10). DiPaola & Walther-Thomas (2003) argue that principal expertise and leadership as regards special education is critical for the successful education of students with disabilities. They argue that principals do not need to be experts on disabilities, but that they do need to have a solid working knowledge of the IDEA, NCLB and legal requirements and of research-based special education practices in order to be effective administrators. If they do not have this basic knowledge, they won't be able to ensure building compliance with the regulations or to foster the collaborative environment necessary for an inclusive school.

Unfortunately, the role of principals in the education of students with disabilities is not always stressed. In the National Association of Elementary School Principals executive summary, subtitled "Standards for What Principals Should Know and Be Able to Do" (2008), there is only one mention of special needs students, and they are grouped in with English language learners and low-income students as members of 'diverse communities.' The standards include no specific mention of any special education knowledge or emphasis on special education being one of the things that principals should know or be able to do. This is in spite of the fact that students with disabilities are a substantial population in schools; in 2009-2010 13.1% of students in American public schools received special education services (National Center for Education Statistics, 2013).

Principals who are committed to inclusive schools and inclusive teaching pass that belief on to their staffs by their words and actions and increase inclusive opportunities in their schools. They use their collaborative leaderships skills to

express confidence in their special needs staff and to reinforce policies with tangible support (DiPaola et al 2004, Bakken & Smith, 2011).

Principals who are instructional leaders and who also understand and advocate for students with disabilities use these skills to stress to their staffs the importance of data usage, progress monitoring, and academic integrity for special needs students. They also recognize that using special education as a dumping ground and means of retention for those students not making expected progress does not work. By electing to use their instructional leadership to teach and guide their staffs toward developing more effective techniques of working with disabled students, they foster collaboration among staff that works to build competence and team-building around instruction for special education students (DiPaola et al, 2004).

Another way that good principals have an effect on special education is through building and maintaining relationships. Part of relationship building involves also cultural sensitivity with regards to students with disabilities of diverse backgrounds (Bakken & Smith, 2011, Hoppey & McLeskey, 2013). School leaders who take the time to get to know the families, the circumstances, the law, and available resources can effectively communicate instructional needs and repair relationships that have broken (DiPaola et al, 2004).

A study conducted on three large urban high schools found that there were five strategies that successful schools put forth to be a 'good' high school for students with disabilities (Brigharm, Morocco, Clay & Zigmond, 2006). The study did

not explicitly draw this conclusion, but all of the characteristics relate directly to the work of a principal.

The strategies include: providing academic choice, providing different types of academic support, connecting and motivating students, building an adult community, and developing responsive leaders; building an adult community is explained by bringing the special education staff and regular education staff closer together in terms of understanding, collaboration, and sharing responsibility (Brigharm et al, 2006). This relates directly to the symbolic and transformational leadership which principals are required to master; they need to bring their staff together under a shared vision and make sure they are working together for all students, including students with disabilities.

The first three strategies relate to the more traditional, administrative work of principals, in working to implement programs, classes and activities that enable all students to succeed. Developing responsive leaders is, of course, a reference to the principal and other administrators, to make sure that they are aware of and act in the interests of special needs students. They also need to work to develop faculty leaders, to lead such activities as co-teaching.

How a principal works for students, such as special needs students, who are at an inherent educational disadvantage must be multifaceted and comprehensive. In the table below, Ross and Berger (2009) compiled a list of 16 research-based strategies that principals should follow to promote the success of disadvantaged students such as students with disabilities; religious, cultural and racial minorities;

students of differing socioeconomic status; students of different genders; and students of differing sexual orientations.

Table 2.3: Evidence-Based Equity Strategies for Principals (Ross & Berger, 2009, p. 465-472)

Encourage staff to talk about issues of diversity, values and social justice	Principals should set up structures in schools where these conversations, however uncomfortable for staff, can take place.
Model equity beliefs for staff	Principals' attitude will impact teachers' practices. Model beliefs through daily interactions and confront stereotypes when they arise among students and staff
Clarify misconceptions about equity issues	Provide intellectual support to staff; share the moral underpinnings of inclusion and other important movements; help staff confront their own unexamined biases
Create a safe, affirming school environment	Create student support networks, move beyond legal compliance to creating a truly welcoming school atmosphere
Enable teachers to provide students with needed support	Stress collaboration among regular and special education staff, help with the acquisition of needed resources, work with schedules to create collaboration time
Provide all students with access to the whole curriculum	Help teachers acquire the skills to teach all students, provide technology to facilitate inclusion
Recognize the potential for bias in special education identification	Realize that poor and minority students tend to be over identified; work with teachers to avoid having bias intrude in referral decisions
Support research-based instructional practices	Pursue such practices to help reduce any gaps in your school's achievement
Install a system to monitor progress toward achievement gap reduction	Good schools must be data-rich; pursue data-tracking technology and see that the results are analyzed and honestly discussed
Provide appropriate accommodations on assessments	Be sure that accommodations are adapted to student needed and administered whenever needed to provide fair access to a challenging curriculum
Discourage strategies meant to artificially inflate test scores	Do not try to avoid having special needs and other students take the test, or take it with inappropriate accommodations, to create an illusion of progress.

	Principals must be sure that test practices are equitable and fair.
Celebrate all achievement gains	Even if students in a certain group do not meet the state standard, but they have made progress, still celebrate their achievement
Increase the reliability of assessments for diverse student populations	Avoid highly subjective assessments that can allow bias into the scoring; work with teachers to be sure their assessments are valid
Avoid cultural, linguistic, and gender bias in item writing	Have someone on staff who can analyze results statistically to determine any bias; work with teachers to recognize and correct test bias
Recognize the expertise of parents and community members	Have parents in schools to share their experiences and viewpoints
Create partnerships with parents to support student learning	Explore community linkages, partner with local agencies to work with parents, work with diverse groups of parents to foster at-home academic reinforcement

Principals, while personally very important in fostering successful inclusion in their schools, do not have a clear picture of what good inclusion means (Barnett & Monda-Amaya, 1998, Pazey & Cole, 2013). Despite efforts to increase the training of administrators in special education, there has not been much additional coursework added in this area in administrator training programs (Pazey & Cole, 2013). A survey of 65 Illinois principals found that the principals did not have a common definition of inclusion nor of which populations would benefit from it. The principals in the study agreed that inclusion was a good thing and that they were working towards it, but they did not share the belief that all students could or should be included in regular education classrooms. It is worth noting that, of the principals in this study, only 30% possessed the 'visionary leadership' which is considered necessary for successful inclusion (Barnett & Monda-Amaya, 1998).

Bays and Crockett (2007) found several disconcerting trends in their research on principals and special education. First, they find that principal interaction with special needs teachers focuses on paperwork and compliance, and are only minimally about instructional quality. They were concerned about the trend of dispersal of special needs leadership across many different people. Bays and Crockett chose the word 'dispersal' versus the more commonly used 'distribution' intentionally because "the word dispersal means to scatter things in ways that cause them to vanish. We fear that the casual dispersal of instructional leadership that we observed threatens the quality of specialized instruction" (p. 158). They felt that when this leadership is shared, principals need to be sure that they are providing a vision that includes good instruction for disabled children, that they extend trust and collaboration to all members of the school community, that they provide teachers with meaningful instructional support, and that they monitor the delivery of specialized instruction. Instructional leadership by principals in the area of special education should be 'aggressive,' they conclude, about pressing teachers to improve and target their instruction of special needs students.

Lack of knowledge of special education on the part of school principals which results in non-compliance with special education law can lead to costly litigation against a school (Davidson & Gooden, 2001). Leaders are in danger of wasting school resources as a result of poor decisions unless they possess this knowledge. Of 120 participants who had completed a principal preparation program in North Carolina, 46.5% related that their knowledge of special education law was basic or limited. Their level of understanding – that is, not just knowing the law but also how

to implement it – was even lower, with 53% indicating that their understanding was basic or limited. The participants were scored on their level of knowledge of different aspects of special education law. The results showed that they had an adequate knowledge of IEPs, zero reject and related services, but that they had below the minimum required level of knowledge on evaluation, parent participation, procedural safeguards and least restrictive environment. As these were people who had completed a leadership program, the authors recommended that leadership programs be improved to include more special education so that the leaders are more knowledgeable and capable as they enter principal positions.

There have been several empirical studies that have worked to assess principals' knowledge of special education. Protz (2005) conducted a study to determine public school administrators' knowledge of special education law and their perception of the preparation for working with disables students. The participants were 51 principals, assistant principals, principal fellows and principal interns in different levels of public education in one state in the Southeast United States. The participants filled out a 46-question survey related to their demographics, their beliefs about their preparation in special education law, and their knowledge of special education law.

The results showed that while 27.5% of the respondents strongly agreed that their education background was adequate to meet the needs of special education students (3.9% strongly disagreed), 51% strongly agreed that additional training in special education law is needed (2% disagreed). The principals were also given

special education-based legal scenarios and asked to respond to them. The results were as follows:

Table 2.4: Principals' Responses to Special Education Legal Scenarios (Protz 2005, p.19)

Area of Special Education Law	Percent of Correct Responses
Eligibility	74.0
Testing	72.5
Discipline	66.7
FAPE	70.6
Evaluation	33.3
Graduation	37.9
Special Education Services	37.9
Compliance	51.3
Due Process	39.2
Related Services	58.8

Other areas where the principals scored poorly were preschool special education, parents who are learning disabled, the impact of failing to meet IEP goals on graduation rate, mediation and due process, and enrollment of special needs students by a noncustodial guardian. Protz concludes that school administrators must increase their special education legal knowledge and calls for additional research into how to disseminate that knowledge out to practitioners (2005).

Wakeman, Browder, Flowers and Algrim-Delzell (2006) also conducted a survey of principals' knowledge of special education. Instead of being focused on law, however this was measuring all aspects of special education knowledge, both fundamental and current. 362 principals completed the survey. The results were that the principals overall reported being well informed about the fundamental issues such as daily routine (referral process, discipline, collaborating with teacher) and knowledge of legislation (IDEA, NCLB), in that the mean response was at least a

'basic' level of knowledge. Principals had the least amount of understanding of more current and specific special education knowledge, such as functional behavior assessments, universal design for learning, alternate assessment, and self-determination practices.

The study found no relationship between principal knowledge of special education and AYP status of the school or years of experience or gender of the principal. Principals who had personal or professional experience with special education had greater special education knowledge, particularly principals who held a special education license.

The principals who had more knowledge also reported more involvement in special education: "One of the most important findings of the study was the relationship between principals' knowledge and their practices… principals who indicated having more knowledge are involved in more aspects of special education… in other words, principals who reported more also reported doing more" (Wakeman, Browder, Flowers and Algrim-Delzell, 2006, p. 167). Principals who had more special education knowledge met more regularly with their special education teachers, were more reflective about special education in their school, and supported special education programs with more resources.

Christensen (2009) surveyed 47 principals or directors of charter schools in Utah to determine their level of special education knowledge. The principals reported that they had great knowledge about the principles of zero reject, LRE, parental involvement, special education law, and FAPE, and that they had a great-to-moderate knowledge of nondiscriminatory evaluation. Principals who had an

administrators' license reported greater levels of knowledge than principals without licenses. Principals in schools where there were a higher percentage of special education students reported higher levels of knowledge of how to show leadership with and mentor special education teachers. The average time per day that the principals reported spending on special education was 16.8%. Christensen (2009) concluded that, overall, the charter school principals were "very confident in their knowledge of inclusive aspects of special education dealing with the six principles of IDEA."

Duncan (2010) also surveyed principals to discover their perception of their effectiveness regarding special education, but in addition she surveyed special education directors to determine their impressions of principal special education knowledge. 'Effectiveness' was considered a combination of skills and knowledge, so this study can be considered partially a measure of principal special education knowledge. The participants were surveyed on their effectiveness in the following areas: understanding law and policy, using data to improve performance of teachers, using data to improve performance of students, creating an inclusive culture, collaborating with families, serving as LEA representative, scheduling, differentiating instruction, using resources, and selecting and supporting quality personnel. Responses were scored on a 1-5 scale (1= poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent). The principals rated their effectiveness of all areas good or very good. The lowest average rating was 3.54 for understanding law and policy and the highest was 4.11 for serving as LEA representative. All told, the principals were

similar to the respondents in Christensen's (2009) survey in that they reported strong special education skills.

The special education directors, however, differed greatly from the principals. They scored the principals as only fair in all areas. The lowest average score was 2.24 for understanding law and policy and the highest was 2.68 for creating an inclusive culture. Clearly, as Duncan (2010) states, "directors view principals as less prepared, and perhaps less effective, in all ten leadership areas than principals perceive themselves to be" (p. 140). Duncan hypothesizes that principals may have 'blind spots' for their own performance, or that principals and special education directors have different views on what constitutes effectiveness.

Summary

The sum of the literature presented in this review points to between special education experience, principal leadership style, and special education outcomes.

Special education involvement and experience interacts with how leaders work with special educators and students with disabilities and their families. Special education is designed by law to foster collaborative, interactive, distributed leadership. Leaders who participate in special education receive exposure and experience working with students with disabilities and the staff who support them. Leaders who have these skills might be more likely to be involved in special education, increasing their experience with special education even more, in a feedback loop where special education experience and knowledge become more associated with each other over time.

The next step in the relationship is to examine whether these experiences translate to perceptions of leadership styles and to programs, culture, curriculum and professional development for special education. Is it possible that principals who have acquired special education knowledge and experience perceive leadership styles differently? It is difficult to know whether these perceptions influence special education programming, school culture around special education students, the curriculum for special education students, and professional development for staff in their building.

The final step connects perceptions of leadership styles to student outcomes. When principals combine their special education background with their perceptions of leadership styles, it is unclear if students benefit from improved programs, culture, and curriculum in their schools to realize better results in terms of academic success, special education percentages, and other measurable outcomes for students with disabilities.

In this way, a principal's special education experience, background, and knowledge interact with their perceptions of leadership styles needed to improve special education in their schools and ultimately improve student outcomes.

CHAPTER 3

METHODOLOGY

Chapters one and two reviewed the importance of principals as leaders of special education and of the differing levels of knowledge of special education that principals may possess. Based on this research, it was hypothesized that there is a relationship between the special education experience that a principal has and that principal's perceptions of leadership styles. The research on principal special education knowledge was not comprehensive nor was it connected to leadership styles. This makes the case for further inquiry into the subject. More research on principal leadership, special education knowledge, and the interaction of the two would be a valuable addition to the literature in this subject.

Principals play an important part in the education of students with special needs, a role which has only become more important in the NCLB era (DiPaola et al, 2004). Principals can impact the environment of a school, provide supports to the teachers of special needs students, support research-based instruction, and influence an entire school in many other ways with a direct effect on students with disabilities (Ross & Berger, 2009). Leadership, for all students, is also critical in an age of educational reform (Elmore, 2000). As described in Chapter 1, there are many leadership styles which manifest themselves in school leaders and can potentially impact schools. Different principals rely on one or more of these styles, as well as their knowledge base, as they lead their schools.

This study will engage school principals with differing amounts of special education experience to better understand their perceptions of prevalent leadership

styles. Due to the complex nature both of special education knowledge and of school leadership, is it is vital to examine and question these important areas and their interplay.

All public school districts serve students with special needs and nearly every school has a principal or equivalent leader. The more information that is available about perceptions of school leadership styles in relation to special education knowledge will better inform leaders ho to best address the needs of students with disabilities to improve learning outcomes and instruction. In this chapter the rationale for the study, participant selection, procedure, and data analysis will be presented.

Research Design and Rationale

The primary purpose of this research is to explore the perceptions of the leadership practices of principals in relation to the special education experience of those same principals, demographic background and student outcomes using a mixed methods approach. It is hoped that this research will contribute to the small but growing body of research on leadership and special education and that it will also prompt further research into the roles of leader knowledge and special education. If, as hypothesized, principals with more special education experience have differing perceptions of leadership styles which have the possibility for improved student outcomes, then there would be implications for principal training and development which would be important in the development of the field.

Q-Methodology

The research will be explored by using Q-sort methodology performed by principals with differing levels of special education background to analyze their leadership styles. Q methodology is used in many fields and "offers a powerful, theoretically grounded, and quantitative tool for examining opinions and attitudes" (Thomas & Watson, 2002). Q techniques provide a way to systematically examine people's self-references and points of view via participants rank-ordering a purposefully generates set of statements, the Q-sample (McKeown & Thomas, 1988). The sorts are then analyzed through factor analysis, and "resulting factors represent points of view, and the association of reach respondent with that point of view Is indicated by the magnitude of his or her loading on that factor" (McKeown & Thomas, 1988, p.13). Factor analysis examines interrelationships among variables; in the case of the Q-sort, what is examined is "correlations among people computed across variables" (Carr, 1989, p. 2). Q-sorts are particularly apt for when "the researcher is interested in obtaining information about 'types' of individuals with regard to certain variables" (Carr, 1989, p. i).

Factor analysis began in 1935, when Sir Godrey Thompson published a paper on the possibility of making correlations between people rather than between tests; despite this he was unwilling to expand the idea further (Brown, 1980). In the same year William Stephenson published a letter that contained the basic techniques of the Q method, from which the full Q-methodology has been derived (Brown, 1980). Among the strengths of Q-technique are that it provides for deep study of small sample populations, helps with exploratory research, is supported by

a well-developed theoretical literature, captures subjectivity through a person's self-reference, the participants need not be randomly selected, and its analysis techniques assist in protecting against researcher influence (Thomas & Watson, 2002).

There have been many studies in the field of education that have used Q methodology. Janson, Militello and Kosine (2008) used Q techniques to investigate the perceptions of the relationships between school counselors and principals. One hundred seventy-seven statements from interviews with principals and counselors were conducted to form the concourse, from which 45 were selected to form the Q sample. Twenty-two counselors and 17 principals then completed the Q-sort. Data analysis revealed four factors which came from the Q-sort data, Working Alliance, Impediments to Alliance, Shared Leadership, and Purposeful Collaboration. The authors found that these different viewpoints which emerged on the relationships between principals and school counselors were a useful framework to use for generating reflection and discussion between principals and counselors. These conversations could then be used to improve counseling services for students, and to help principals work more collaboratively with counselors.

A follow-up Q methodology-based study also involved school counselors; in this case, how counselors perceive their own leadership behaviors (Janson, 2009). The author contended that, since counselor leadership is a prime agent of change in schools but there a dearth of specific descriptors of their leadership behaviors, a Q sort could help identify systemic leadership patterns among the counselors and fill in that research gap. The concourse was derived from a combination of counselor

interviews and professional leadership literature, and then developed into a 40-item Q sample. Forty-nine counselors in five states completed the Q-sort. Four factors were developed that represented different leadership patterns: Self-Focused and Reflective Exemplar, Ancillary School Counseling Program Manager, Engaging Systems Change Agent, and Empathetic Resource Broker. Although Janson (2009) cautioned that the four groups shared many similarities, he concluded that there were enough differences to show that counselors lead in diverse ways that have different strengths, and that some of this diversity is impacted by the school context where the counselor practices.

Research into preschool practices used Q methodology to explore staff actions in the classroom (Bracken & Fischel, 2006). Sixty-six preschool staff members participated in the study, which attempted to add a new way to discover preschool practices other than traditional instruments such as observation. The Q-sort consisted of 49 classroom practices, which were derived from a concourse of 60 items taken from standards and guidelines for preschool education. Items that were redundant or repetitive were removed and the sort was piloted with a small group of preschool teachers, at which point the sort and its directions were clarified and finalized. The 66 teachers who completed the final sort had to arrange the cards in a forced choice on a scale from Extremely Uncharacteristic to Extremely Characteristic. Twenty-seven of the teachers were also observed in their preschool class as part of data collection.

Data analysis found that preschool teachers valued social-emotional practices more than they did cognitive development activities. Five of the ten

lowest-ranked q-sort items were focused on writing/reading skills. This was consistent with other research, which found that literacy and early math skills were undervalued by teacher in comparison with social-emotional skills. Janson (2009) questioned if the low rating of literacy was due to teachers intentionally not prioritizing those skills, or if it was because of a lack of teacher knowledge of literacy skills, and concluded that further research is called for.

Several recent researchers have utilized Q-sorts to analyze educational leadership. Provost, Boscardin, and Wells (2010) conducted a Q-sort with 21 statements about principal leadership behavior based on a questionnaire developed by Heck and Marcoulides (1993), and combined that data with a qualitative survey reflecting on the Q-sort. Thirty principals, assistant principles, and education administrators participated in the Q-sort and survey. The researchers found that having high expectations and helping staff members improve their effectiveness were among the highest rated sort items, and that half of principals sorted themselves in agreement as one factor, emphasizing the principal's role as a goal setter, and the other half did not have enough commonality to become another factor (2007).

Mosley, Boscardin, and Wells (in press) expressly built on Provost el al.'s work. He performed Q-sorts with 35 principles utilizing the Multifactor Leadership Questionnaire (MLQ). The MLQ was first introduced by Bass (1985) and contains items that reflect different types of transformational, transactional and laissez-faire leadership. Mosley et al., like Provost et al. (2010), performed follow-up with a questionnaire, and also collected demographic data on the principles who

participated in his study. Factor analysis divided the principles into two factors, with one principal who did not fit into either. The first factor was considered to be 'mission-oriented' principals, and the second to be 'collaboration-oriented' principals. Mosley et al. called for a potential merging of these groups, to the improvement of the principalship as a whole.

Tudryn (2012) continued this avenue of research, investigating perceptions of distributed leadership via Q methodology. Tudryn provided Q sorts to 15 special education administrators and 15 special education teacher leaders. Tudryn adapted the Distributed Leadership Inventory developed by Hulpia, Devos, and Rosseel (2009) to form his distributed leadership Q-sort items. He also surveyed and acquired demographic data on the participants. Two factors were discovered via factor analysis; the first factor consisted mainly of younger male participants with less experience in urban districts who favored a planned use of distributed leadership, while the second factor contained older female participants form more rural and affluent districts who favored professionalism and collegiality in their approach to embedded distributed leadership.

This study will build on the work begun by Provost et al (2010), Mosley et al. (in press), and Tudryn (2012). It will draw on items from the sorts developed for their studies – items which have already been validated for research - and apply them to the leadership styles of current principals.

Item Development and Selection

Generally, 30 to 60 items are used in a Q-sort (Thomas & Watson, 2001). For this study 47 Q-sort items were employed. This is in the item range to yield valuable

data without confusing or overwhelming the sort participants with too many statements.

In this study, the researcher incorporated items used in previous Q-sorts (Provost et al., 2010; Mosley et al. (in press); Tudryn 2012) as well as newly developed sort items to investigate the perceptions of leadership styles by principals. The researcher analyzed how leadership was perceived among principals through the completion of a Q-sort ranking distributed, collaborative, instructional and laissez-faire/transactional leadership items.

The initial Q-sort concourse items developed for this study were as follows:

1. Ensure there are well-functioning special education leadership teams (Hulpia, Devos, & Rosseel, 2009)
2. Ensure members of the special education leadership teams have clear goals (Hulpia, Devos, & Rosseel, 2009)
3. Ensure members of special education teams have clear roles and responsibilities (Hulpia, Devos, & Rosseel, 2009)
4. Ensure members of the special education teams prioritize tasks they have to perform (Hulpia, Devos, & Rosseel, 2009)
5. Ensure the special education team supports the district goals (Militello & Janson, 2007)
6. Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members (Militello & Janson, 2007)
7. Provide educators with time to address the most important needs of students with disabilities (Militello & Janson, 2007)
8. Support open communication (Militello & Janson, 2007)
9. Promote a professional collegial atmosphere (Militello & Janson, 2007)
10. Assist special educators on analyzing appropriate interventions (Militello & Janson, 2007)
11. Collaborate with teachers on professional development. (Militello & Janson, 2007)
12. Promote a professional collegial atmosphere. (Militello & Janson, 2007)
13. Hold high expectations for staff performance. (Heck & Marcoulides, 1993)
14. Engage teachers in formal and informal discussions of instruction as it impacts student achievement. (Heck & Marcoulides, 1993)
15. Communicate instructional goals. (Heck & Marcoulides, 1993)
16. Encourage discussion of instructional goals. (Heck & Marcoulides, 1993)
17. Maintain high faculty morale. (Heck & Marcoulides, 1993)

18. Establish an orderly environment for learning. (Heck & Marcoulides, 1993)
19. Develop school goals. (Heck & Marcoulides, 1993)
20. Systematically observe teachers' instructional methods. (Heck & Marcoulides, 1993)
21. Help staff members improve their instructional effectiveness. (Heck & Marcoulides, 1993)
22. Involve staff in critical instructional decisions. (Heck & Marcoulides, 1993)
23. Encourage discussion of instructional goals. (Heck & Marcoulides, 1993)
24. Report academic progress to the community. (Heck & Marcoulides, 1993)
25. Secure resources necessary to support the instructional program. (Heck & Marcoulides, 1993)
26. Evaluate the curricular program. (Heck & Marcoulides, 1993)
27. Provide others with assistance in exchange for their efforts. (Bass, 1985)
28. Discuss in specific terms who is responsible for achieving performance targets. (Bass, 1985)
29. Make clear what one can expect to receive when performance goals are achieved. (Bass, 1985)
30. Show firm belief in "If it ain't broke, don't fix it." (Bass, 1985)
31. Ensure that behavior is predictable and consistent. (Bolman & Deal, 2008)
32. Direct attention toward failures to meet standards. (Bass, 1985)
33. Express satisfaction when others meet expectations. (Bass, 1985)
34. Focus attention on irregularities, mistakes, exceptions, and deviations from the standards. (Bass, 1985)
35. Maximize staff performance using formal roles and responsibilities. (Bolman & Deal, 2008)
36. Concentrate full attention on dealing with complaints. (Bass, 1985)
37. Talk optimistically about the future. (Bass, 1985)
38. Talk enthusiastically about what needs to be accomplished. (Bass, 1985)
39. Articulate a compelling vision of the future. (Bass, 1985)
40. Express confidence that goals will be achieved. (Bass, 1985)
41. Talk about the most important values and beliefs. (Bass, 1985)
42. Specify the importance of having a strong sense of purpose. (Bass, 1985)
43. Consider an individual as having different needs, abilities, and aspirations from others. (Bass, 1985)
44. Help others to develop their strengths. (Bass, 1985)
45. Consider the moral and ethical consequence of decisions. (Bass, 1985)
46. Use symbols to develop meaning for staff. (Bolman & Deal, 2008)
47. Serve as a role model for staff to emulate. (Bolman & Deal, 2008)
48. Tell stories to share important values. (Bolman & Deal, 2008)
49. Develop school culture over time. (Bolman & Deal, 2008)

The 49 working Q-Sort statements were piloted with a cohort of 5 doctoral students enrolled in the special education administration program at the University of Massachusetts, Amherst. Participants were shown the Q-Sort grid and informed

that only 2 leadership statements can be assigned to the +5 column; 3 leadership statements to the + 4 column; 4 leadership statements for the +3 column; 5 leadership statements for the +2 column; and 7 leadership statements for the + 1 column. The cohort was also instructed to follow the same procedures for the negative side of the continuum and that 7 statements were assigned to the 0 column.

Each participant completed the Q-sort individually. The researcher was available to answer questions and provide clarification while the sort was being completed. After completing the sort, the cohort was asked to complete the following questionnaire to provide feedback about the Q-sort items:

Principal Leadership and Special Education

Pilot Participant Follow-up Questionnaire

1) Please list any statements that are duplicate of each other.
2) Please list what statements should be eliminated. Briefly explain.
3) Please list what statements should be kept. Briefly explain.
4) What statements need changing (i.e. wording/language)? Please list any suggestions for changes.

Each participant answered the question individually and provided written responses to the researcher. The cohort then engaged in a whole-group discussion about the Q-sort items using their written reflections as a guide. The follow-up discussion was intended to help the researcher gain insight into the sort and to provide feedback to help improve the sort items. The cohort reported that there were some corrections to be made to improve the sort items. Items 9 and 12 were duplicates, as were items 16 and 23, so the duplication was corrected and two of the items removed. Item 46 was rewritten to be clearer on what the word 'symbols' meant. In the whole-group discussion the participants felt that the sort items were

otherwise clear and provided the feedback that they felt the sort was ready for use in research. After the discussion, the questionnaires were collected and further analyzed by the researcher, from which the following set of sort items were developed:

1. Ensure there are well-functioning special education leadership teams (Hulpia, Devos, & Rosseel, 2009)
2. Ensure members of the special education teams have clear goals (Hulpia, Devos, & Rosseel, 2009)
3. Ensure members of special education teams have clear roles and responsibilities (Hulpia, Devos, & Rosseel, 2009)
4. Ensure members of the special education teams prioritize tasks they have to perform (Hulpia, Devos, & Rosseel, 2009)
5. Ensure the special education team supports the district goals (Militello & Janson, 2007)
6. Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members (Militello & Janson, 2007)
7. Provide educators with time to address the most important needs of students with disabilities (Militello & Janson, 2007)
8. Support open communication (Militello & Janson, 2007)
9. Promote a professional collegial atmosphere (Militello & Janson, 2007)
10. Assist special educators on analyzing appropriate interventions (Militello & Janson, 2007)
11. Collaborate with teachers on professional development. (Militello & Janson, 2007)
12. Hold high expectations for staff performance. (Heck & Marcoulides, 1993)
13. Engage teachers in formal and informal discussions of instruction as it impacts student achievement. (Heck & Marcoulides, 1993)
14. Communicate instructional goals. (Heck & Marcoulides, 1993)
15. Encourage discussion of instructional goals. (Heck & Marcoulides, 1993)
16. Maintain high faculty morale. (Heck & Marcoulides, 1993)
17. Establish an orderly environment for learning. (Heck & Marcoulides, 1993)
18. Develop school goals. (Heck & Marcoulides, 1993)
19. Systematically observe teachers' instructional methods. (Heck & Marcoulides, 1993)
20. Help staff members improve their instructional effectiveness. (Heck & Marcoulides, 1993)
21. Involve staff in critical instructional decisions. (Heck & Marcoulides, 1993)
22. Report academic progress to the community. (Heck & Marcoulides, 1993)
23. Secure resources necessary to support the instructional program. (Heck & Marcoulides, 1993)
24. Evaluate the curricular program. (Heck & Marcoulides, 1993)

25. Provide others with assistance in exchange for their efforts. (Bass, 1985)
26. Discuss in specific terms who is responsible for achieving performance targets. (Bass, 1985)
27. Make clear what staff can expect to receive when performance goals are achieved. (Bass, 1985)
28. Show firm belief in "If it ain.'t broke, don.'t fix it." (Bass, 1985)
29. Ensure that behavior is predictable and consistent. (Bolman & Deal, 2008)
30. Direct attention toward failures to meet standards. (Bass, 1985)
31. Express satisfaction when others meet expectations. (Bass, 1985)
32. Focus attention on irregularities, mistakes, exceptions, and deviations from the standards. (Bass, 1985)
33. Maximize staff performance using formal roles and responsibilities. (Bolman & Deal, 2008)
34. Concentrate attention on dealing with complaints. (Bass, 1985)
35. Talk optimistically about the future. (Bass, 1985)
36. Talk enthusiastically about what needs to be accomplished. (Bass, 1985)
37. Articulate a compelling vision of the future. (Bass, 1985)
38. Express confidence that goals will be achieved. (Bass, 1985)
39. Talk about the most important values and beliefs. (Bass, 1985)
40. Specify the importance of having a strong sense of purpose. (Bass, 1985)
41. Consider an individual as having different needs, abilities, and aspirations from others. (Bass, 1985)
42. Help others to develop their strengths. (Bass, 1985)
43. Consider the moral and ethical consequence of decisions. (Bass, 1985)
44. Use symbols (metaphors, ceremonies) to develop meaning for staff. (Bolman & Deal, 2008)
45. Serve as a role model for staff to emulate. (Bolman & Deal, 2008)
46. Tell stories to share important values. (Bolman & Deal, 2008)
47. Develop school culture over time. (Bolman & Deal, 2008)

Definitions

For the purposes of this study, a 'principal' is a person who is currently employed as the principal of a public school. A 'principal with special education background' will be a principal who has a degree (bachelor's, master's, CAGS, or doctorate) in special education, or who is (or has been) certified as a special educator or related service provider, or who has been previously employed as a special educator or related service provider in a public school. A 'principal without special education background' will be defined as one who has none of these

elements. 'Student outcomes' for a school will be defined as proficiency rates on the MCAS test and the percentage of students enrolled in special education. 'Leadership style' for the participants will defined as the result of their Q-sorts and interviews.

Participants

Similar to Provost et al. (2010) and Tudryn (2012), the participants in this study were nonrandomly selected. Since this research investigates the special education knowledge and the leadership styles of principals, the participants were principals in Massachusetts. The selection of participants is not based on sampling theory in a Q-methodology study; therefore, a small, purposeful sample is acceptable (Brown, 1980). Thirty principals were selected to participate in the Q-sort. Fifteen of these principals came from a special education background and fifteen did not.

Background information on the participants and their districts were also collected. These data was gathered from a participant demographic questionnaire, the Massachusetts Department of Education website, and the participants' school and district websites. The characteristics of the participants' gender, age, ethnicity, years in current position, teaching experiences, number of years in the position, student enrollment, school district enrollment, certification level, and education were collected.

For the purpose of this study, gender was defined as either male or female. Age was indicated by ten year intervals beginning with age 20. Choices for ethnicity were the following: African-American or Black, Asian, Hispanic or Latino, Multi-race (Non-Hispanic), Native American, Native Hawaiian or Other Pacific Islander, or

White. The category of years in the position was defined as the number of years that the principal had been employed as a principal in the current school district. Teaching experience was defined as number of years accumulated at all school levels in both general and special education. Educational level was defined as participants' maximum level of education (e.g. a master's degree, master's degree plus thirty credits, or a doctoral degree).

District data were gathered from the school district profiles on the website of the Massachusetts Department of Education. Student district enrollment was reported as greater than or less than 3,000 as opposed to the district's actual enrollment, and school enrollment was greater or less than 350. School district profiles on the Massachusetts Department of Education provide actual enrollment. In addition, the special education enrollment percentage for each school was noted. Each district's accountability status along with per pupil expenditures was collected. Accountability determinations were as follows: Level 1, aggregate and high needs progress and performance indices are 75 or higher with 95% MCAS participation for all groups; Level 2, aggregate or high needs cumulative progress and performance index is less that 75 or the MCAS participation rate for any group is between 90 and 94.9%; Level 3, the school places in the lowest 20 percent aggregate relative to other schools in the same school type category statewide, one or more subgroups is in the lowest 20 percent of like subgroups statewide and also places in the lowest 20 percent of all subgroups statewide; or the MCAS participation rate for any group below 90%; Level 4, the school is among the lowest achieving Level 3 schools statewide; Level 5, the school has failed to improve at the end of its redesign plan

and is unlikely to do so without Level 5 status (Massachusetts Department of Elementary and Secondary Education, 2013). Schools that end in or before grade 1 or 2, new schools, or very small schools did not have an accountability determination. District per pupil expenditures students was collected from the DESE website and tallied as greater or less than $13,500, which was approximately the state average for per pupil expenditure. The district-wide percentage of the budget spent on special education was collected from the DESE website. In addition, the percentage of students receiving free or reduced lunch was taken from the school district directory profile information that is located on the DESE website.

The district level student achievement data were reported using Massachusetts Comprehensive Assessment System (MCAS) scores, which was a measure of the distribution of student performance designed to show proficiency as related to the state standards. The MCAS scores are used to inform the accountability status of each school and district in Massachusetts. The MCAS was designed to meet the requirements of the Massachusetts Education Reform Law of 1993. MCAS also meets the participation requirements for state standardized testing of No Child Left Behind 2001. Students in grades three through eight, and grade 10 take the MCAS exams to evaluate their knowledge in the content areas of English Language Arts, Math, and Science. Students are required to earn a passing score in each of the three subjects prior to graduation in order to receive a diploma. MCAS data were collected for the special education subgroup as a measurement of the effectiveness of the school special education program. Results for the special education subgroup were not reported if the school did not offer grades that take

the MCAS test (preschool or K-3 schools) of if the number of students in the special education subgroup was less than 10.

Table 3.1: Characteristics of Participants With and Without Special Education Background

		Principals With Special Education Background		Principals Without Special Education Background	
		N= 15	**%**	**N=15**	**%**
Gender	Male	7	47%	10	67%
	Female	8	53%	5	33%
Years In Current Position	Less than Five	11	73%	12	80%
	Five or More	4	27%	3	20%
Years of Administrative Experience	Less than Five	6	40%	4	27%
	Five to Ten	3	20%	5	33%
	More than Ten	6	40%	6	40%
Years of Teaching Experience	Less than Five	2	13%	1	7%
	Five or More	13	87%	14	93%
Age	20 to 30	0	0%	1	7%
	31-40	6	40%	5	33%
	41-50	6	40%	6	40%
	51-60	3	20%	2	13%
	61-70	0	0%	1	7%

		Principals With Special Education Background		Principals Without Special Education Background	
		N= 15	**%**	**N= 15**	**%**
Type of Special Education Experience	None	0	0%	0	0%
	Prior employment, degree, certification	5	33%	0	0%
	Prior employment, degree	4	27%	0	0%

	Prior employment, certification	2	13%	0	0%
	Prior employment	2	13%	0	0%
	Degree	2	13%	0	0%
Highest Level of Education	Master's Degree	4	27%	5	33%
	Master's Plus 30	10	67%	8	53%
	Doctorate	1	13%	2	13%
Level of Teaching History	Elementary	3	20%	6	40%
	Secondary	5	33%	6	40%
	Both Elementary and Secondary	7	47%	3	20%
Type of Teaching Experience	General Education	4	27%	15	100%
	Special Education	4	27%	0	0%
	Both General and Special Education	7	47%	0	0%
Ethnicity	White	13	87%	13	87%
	African-American	1	7%	0	0%
	Hispanic/Latino	1	7%	1	7%
	White and Hispanic/Latino	0	0%	1	7%
		Principals With Special Education Background		**Principals Without Special Education Background**	
		N= 15	**%**	**N= 15**	**%**
District Enrollment	Less than 3,000	8	53%	14	93%
	More than 3,000	7	47%	1	7%
School Enrollment	Less than 350	5	33%	5	33%
	More than 350	10	67%	10	67%

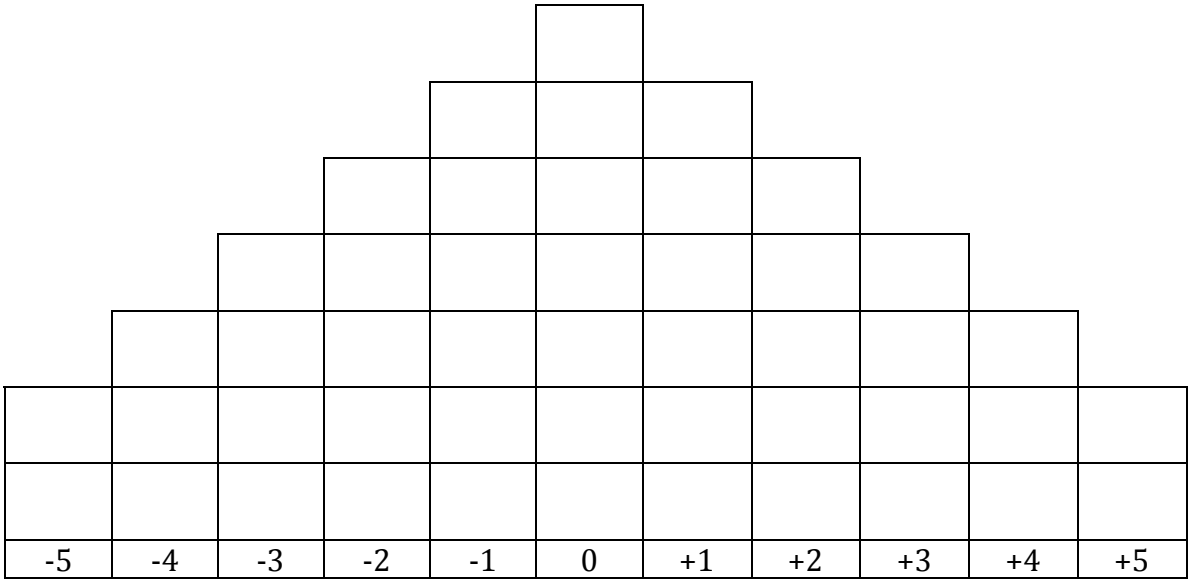
Per Pupil Spending (District)	Less than $13,500	10	67%	10	67%
	More than $13,500	4	27%	5	33%
	Not Reported	1	7%	0	0%
Percentage of Budget Spent on Special Education (District)	10 to 20%	6	40%	8	53%
	20 to 30%	9	60%	7	47%
Percentage of Students with Free and Reduced Lunch	Less than 10%	3	20%	1	7%
	10 to 20%	1	7%	3	20%
	20 to 30%	4	27%	4	27%
	30 to 40%	2	13%	5	33%
	40 to 50%	1	7%	0	0%
	60 to 70%	0	0%	1	7%
	70 to 80%	3	20%	0	0%
	Not Reported	1	7%	0	0%
Percentage of Students with Disabilities Scoring Proficient on the ELA MCAS	Less than 10%	2	20%	2	13%
	10 to 20%	0	0%	4	27%
	20 to 30%	4	27%	1	7%
	30 to 40%	2	13%	2	13%
	40 to 50%	0	0%	0	0%
	50 to 60%	1	7%	2	13%
	60 to 70%	1	7%	2	13%
	80% or Greater	1	7%	0	0%
	Not Reported	2	13%	2	13%
		Principals With Special Education Background		**Principals Without Special Education Background**	
		N= 15	**%**	**N=15**	**%**
Percentage of Students with Disabilities Scoring Proficient on the Mathematics MCAS	Less than 10%	7	47%	4	27%
	10 to 20%	1	7%	5	33%
	20 to 30%	1	7%	3	20%
	30 to 40%	3	20%	1	7%
	50 to 60%	1	7%	0	0%
	Not Reported	2	13%	2	13%

Accountability Status	Level 1	3	20%	4	27%
	Level 2	6	40%	10	67%
	Level 3	4	27%	1	7%
	Not Reported	2	13%	0	0%
Special Education Enrollment Percentage	Less than 10%	1	7%	1	7%
	10 to 20%	10	67%	13	87%
	21 to 30%	2	13%	1	7%
	30% or Greater	2	13%	0	0%

Procedures

During the study, first the participants read the consent form and signed it, then filled out the demographic questionnaire. The study participants were next asked to order the Q-Sort items according to the following grid:

Figure 3.1: Q-Sort Grid



Participants were instructed as to the nature of the Q-sort, meaning that only 2 leadership statement can be applied to the +5 column, 3 leadership statements can

be assigned to the +4 column; 4 leadership statements to the + 3 column; 5 leadership statements for the +2 column; and 6 leadership statements for the +1 column. Seven statements may be applied to the neutral, or 0 column. Participants followed the same procedure for the negative side of the sort. This particular template allows for neutral sorted statements to be categorized in the middle rather than at the extreme ends. Next, the participants responded to follow-up sort questions that were designed to document the participants' thought process behind their sorts and obtain other information regarding their beliefs about special education.

The questions asked were as follows:

1) Briefly describe what went into your choices of statements that are "most representative of my leadership?"(+5's).

   Please list at least one number of a statement in the +5 column and your reasons for placing it there.

2) Briefly describe what went into your choices of statements that are "least representative of my leadership?" (-5's).

   Please list at least one number of a statement in the -5 column and your reasons for placing it there.

3) If there were other specific statements that you had difficulty placing, *please list the number of the statements and describe your dilemma.*

4) What other issues/thoughts emerged for you while sorting the cards?

5) Describe how you arrived at your overall most important statements of your leadership.

6) Describe how you arrived at your overall least important statements of your leadership.
7) How great a factor was your special education background or lack thereof in placing the statements? *Please give specific examples for each if applicable*.
8) How do you feel about the outcomes for special education students in your school?
9) What is the biggest help you have with special education outcomes?
10) What is the biggest obstacle?
11) Do special education staff regularly participate in your building-level meetings?

The Q-sort results were both written down in notes on a copy of the questionnaire and photographed by the researcher. The notes were taken by hand while the participant was speaking. The photographs were taken using a cell phone camera after the completion of the sort. The answers to the above questions were digitally recorded in addition to note-taking by the researcher. After completing the Q-sort, questionnaire and questions, the data gathering session was completed for that participant.

Data Analysis

Participants were asked to rank 47 statements related to different styles of leadership. The researcher then compared participants' sorts to determine whether there are themes, patterns, and/or differences among them. Inductions were then be able to be made based on the participants' sorts. It was determined if there were

clusters of participants with identical sorts, indicating common leadership perspectives, or if the participants sorted at random. This allowed the researcher to make generalizations based on the results of the sorts.

The computer software SPSS (Statistical for the Social Sciences) was used to analyze the results of the Q-sort. SPSS is widely used in the field of social science, statistics, and mathematics. This software includes descriptive statistics, bivariate statistics, prediction of numerical outcomes, and prediction of identifying groups. The SPSS software package was apt in this study for creating several descriptive statistics to evaluate the study's data.

The results of the sorts were entered in SPSS for analysis. Factor analysis was performed on the sort results to create groups of participants for the researcher to interpret. Factoring was used to extract the results and observe how the participants are grouped as a result of their responses to the Q-sort. Clusters of participants were identified who sorted similarly in a way that separated them from the rest of the participants' sorts; participants who held similar leadership perspectives were grouped together. The results were rotated to further interpret the factors. The results of the SPSS analysis were combined with the qualitative data from the interviews as is discussed in the next section.

Calculated principle component scores were used to determine rankings of leadership items within each discovered factor. Statements ranked least representative of my leadership (-5) and most representative of my leadership (+5), were examined to discover whether there are any commonalities among the

statements at the extreme negative and at the extreme positive of the Q-sort that revealed possible patterns used by the participants to sort the statements.

The qualitative data collected via the follow-up interviews with the participants allowed for the description of each group's attitudes or perspectives of leadership. The questionnaires collected important demographic and district data. Results from the Q-sort were used to assist with the describing of the relationship of the demographic and district characteristics, and comparisons were also drawn using this data.

Analyzing both the qualitative and quantitative data showed the most and least valued leadership items of any clusters. This was then compared to the level of special education knowledge of the participants to determine a possible intersection of the two. Participant's responses from the follow-up sort questions provided further clarity into how they value leadership attributes. The researcher analyzed and explained any discrepancies using multiple methodologies. Throughout the study, qualitative and quantitative data were collected simultaneously. They were, however, analyzed at different points throughout the research process. Through correlation analysis, the researcher was able to identify the sorting patterns or themes coming from the participants.

The constant comparative method of data analysis is a technique used in qualitative methods, including grounded theory (Merriam, 2009). In this technique, 'chunks' of data are examined to identify meanings or patterns in the data. In this study, participants' responses to the questionnaire are compared to the working

labels assigned to the sorts. This process allows the researcher to apply grounded theory to create labels within the qualitative data.

Grounded theory as prescribed by Merriam (2009), assists with the identification of labels and categories; creating a description of the components of the labels; and crafting an explanation of theory regarding the components used to create the perspective described by the labels.

In this study, the term 'label' will maintain the same meaning as it would in any qualitative study. The qualitative data is used in the development of dimensions because the post-sort questions force the participants to think about their choice selections and supply the researcher with additional information about their thought process. Appropriate labels are constructed to describe the sorts, using both item rankings in the Q-sort and the qualitative statements of participants from their oral responses. The qualitative questions ask participants to reflect about choices made while doing the Q-sort. Responses provide details about their personal beliefs regarding leadership.

Descriptors (similarly to labels) identify and describe concepts in data. Descriptors, however, are primarily used to create descriptive details for labels. Descriptors create subcategories that break the labels into various parts. The relation between descriptors and labels is similar to the relation between "properties" and "categories" described by Merriam (2009).

Finally, the development of hypotheses connects dimensions to labels and creates an explanation participants' subjectivity (Merriam, 2009). The questions asked of the participants after they completed their sorts were designed to show

each participant's subjectivity, since the questions required the participants to elaborate on their thought process. Participants' answers helped to develop hypotheses about the criteria that led to their placement and arrangement of the statements during the sort exercise.

Research Questions

The primary purpose of this research was to improve the understanding of the relationship between principal special education knowledge and principal leadership style as it extends towards student outcomes. This study investigated principal leadership style through the qualitative analysis of the Q-sort data by determining the ranking given to each leadership statement by principals. Also, the results of the Q-sort were applied to further describe the relationship of the factors to demographic and district characteristics. Principal special education knowledge was controlled by selecting the participants so that half of the principals had prior special education experience and the other half did not. Information on student outcomes came from publicly available data sources. Demographic information came both from the participants and from publicly available data sources. This research contributes to identifying future research in the area of principal leadership and knowledge in the field of special education. The research questions that guided this study were:

1. Are there clusters of participants who ranked the Q-Sort leadership statements similarly and differently?

2. Do the clusters relate to the principals who do and do not have a special education background, thereby connecting leadership to special education background?

3. Is there a difference in special education student outcomes for principals who do and do not have a special education background?

4. Do demographic and district variables have an effect on any of the above research questions?

Summary

This mixed-methods study combined several data sources to shed light on the perceptions of leadership among principals with and without special education knowledge. The Q-sort exercise allowed for grouping of the principals based on the factors revealed by their sorts. The principal participants in the study had varying levels of special education knowledge and experience. Combining that background with the Q-sort data, the relationship between the factors and the special education knowledge of the participants was explored and compared with data on student outcomes to provide a complete picture of the impact of special education knowledge and the principalship upon students. The qualitative interview data and the additional demographic and district data added extra dimensions that created a complete picture of the principals involved in the study.

Through this research, the researcher hopes to shed valuable light on how principals perceive leadership, how special education experience impacts this leadership, and how demographic variables interact with the sorts. In addition to the important information that will be gained from this study, there could be

implications for the development of principals and their needs as they attempt to provide the best possible education for their special education students.

CHAPTER 4

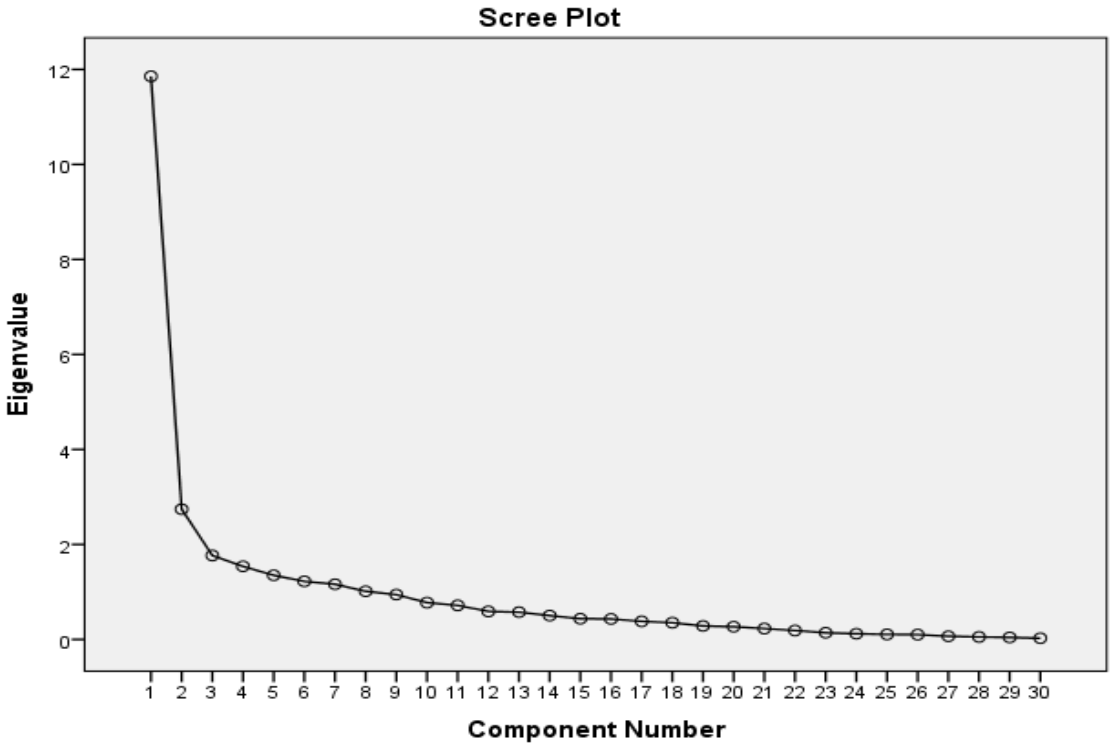
FINDINGS

The results reported in this chapter are based on the factor analysis of the Q-Sort results, and the responses to the questions following the sort. The participants are divided into two groups (factors) based on their perceptions of their leadership. The contribution of special education background and demographic variables of the participants is delineated. The make-up of the resulting clusters is described using the participants' rationale for their choices.

Factor Membership

Analysis of the Q-sort data through the SPSS factor analysis program was conducted to confirm the existence of factor within the data. The factor analysis produced two clusters and generated a scree plot (see Figure 4.1).

Figure 4.1: Scree Plot



Each eigenvalue plotted above the 'elbow,' or sharp bend in the graphed line on the scree plot, represents a separate and significant factor. The scree plot shows that the factor analysis produced two factors above the elbow; the first with an eigenvalue of 11.855 and the second with an eigenvalue of 2.742. The remaining points on the scree plot fell below the elbow, demonstrating lack of relevance.

With the number of factors determined, the data were further analyzed to attain more information on the two identified factors. A correlation matrix and a rotated principal component plot was computed (Figure 4.2) to better display the generated relationship between the two factors. The Y axis on the principal component plot represents the first factor and the X axis represents the second factor

Figure 4.2: Component Plot in Rotated Space

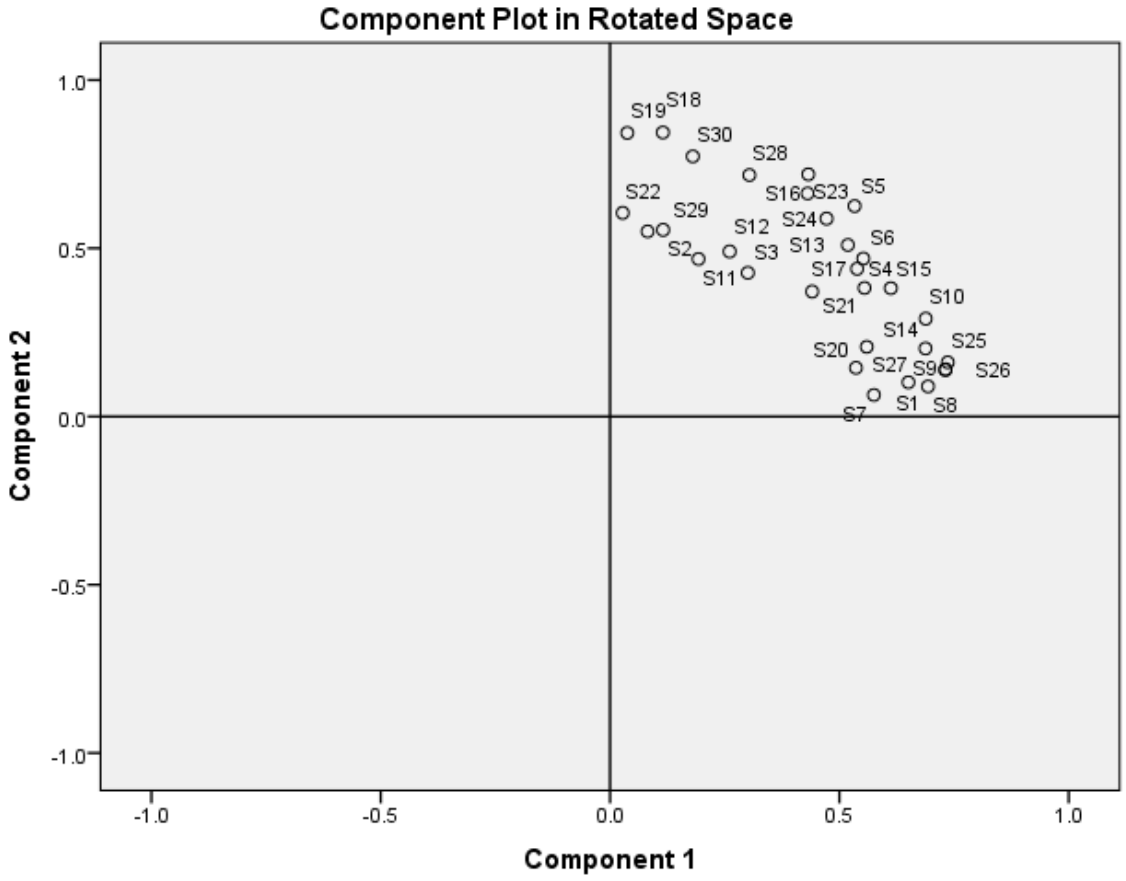


Table 4.1
Correlation Matrix Between Sorts

1	**100**																												
2	28	**100**																											
3	08	26	**100**																										
4	**31**	**29**	**51**	**100**																									
5	**44**	**32**	**38**	**54**	**100**																								
6	**43**	**31**	**41**	**44**	**55**	**100**																							
7	**37**	03	23	27	**30**	**41**	**100**																						
8	**48**	26	**29**	22	**44**	**49**	**39**	**100**																					
9	**42**	13	**34**	**54**	**42**	**36**	**51**	**45**	**100**																				
10	**41**	23	**44**	**49**	**53**	**39**	**37**	**29**	**59**	**100**																			
11	18	08	21	**38**	**37**	**43**	22	25	28	26	**100**																		
12	24	**35**	28	**33**	**48**	**43**	18	27	13	**36**	**36**	**100**																	
13	**38**	24	**39**	**45**	**58**	**47**	**40**	**43**	**37**	**47**	**30**	**33**	**100**																
14	**38**	**30**	**33**	**42**	**41**	**56**	**44**	**60**	**36**	**48**	18	18	**41**	**100**															
15	**43**	27	**51**	**61**	**56**	**54**	**44**	**43**	**48**	**48**	23	**33**	**50**	**44**	**100**														
16	24	**38**	**38**	**59**	**63**	**53**	**36**	**32**	**40**	**49**	**34**	**41**	**60**	**54**	**54**	**100**													
17	18	**31**	11	**33**	**43**	**46**	28	**40**	**36**	**31**	**26**	**38**	**33**	**52**	**46**	**50**	**100**												
18	**29**	**57**	**41**	**37**	**61**	**53**	25	20	23	**30**	**43**	**43**	**55**	21	**38**	**59**	**30**	**100**											
19	24	**46**	28	**38**	**52**	**37**	04	11	23	21	**45**	28	**50**	08	**37**	**54**	28	**70**	**100**										
20	21	00	10	28	**42**	**41**	27	**45**	**32**	**30**	06	11	**31**	**52**	**40**	**38**	**49**	06	18	**100**									
21	**39**	**33**	**38**	**58**	**61**	**44**	20	**34**	**48**	**49**	25	25	**48**	**40**	**57**	**41**	27	**36**	**47**	25	**100**								
22	-10	**32**	**53**	**38**	**33**	13	-03	07	22	**32**	**36**	11	24	09	25	**46**	20	**43**	**44**	07	23	**100**							
23	-34	**51**	**39**	**40**	**64**	**60**	24	**35**	28	**54**	**32**	**39**	**55**	**54**	**46**	**62**	**36**	**57**	**55**	21	**48**	**36**	**100**						
24	22	**34**	**42**	**49**	**64**	**41**	27	**31**	**46**	**56**	16	**34**	**57**	**48**	**35**	**69**	**47**	**50**	**47**	**49**	**44**	**44**	**53**	**100**					
25	**51**	18	12	**47**	**54**	**35**	21	**46**	**57**	**61**	**31**	28	**43**	**34**	**35**	**39**	**29**	19	22	**33**	**47**	**31**	**48**	**43**	**100**				
26	**51**	19	21	**40**	**42**	**46**	19	**49**	**50**	**58**	**30**	28	**41**	**38**	**42**	**39**	24	17	15	24	**45**	**29**	**51**	**38**	**88**	**100**			
27	**46**	11	09	**40**	**33**	**28**	**32**	23	**48**	**52**	03	28	**53**	**32**	26	**43**	27	**32**	24	21	**33**	-02	**39**	**48**	**46**	**41**	**100**		
28	28	**35**	**30**	**48**	**69**	**48**	11	22	27	**40**	27	**55**	**40**	**38**	**47**	**68**	48	**49**	**55**	**44**	**47**	**37**	**59**	**64**	**33**	28	28	**100**	
29	21	18	-01	05	**31**	**32**	20	15	06	19	25	27	**38**	28	21	**58**	**31**	**46**	**39**	13	10	18	**47**	23	08	15	**37**	**44**	**100**
30	25	**30**	19	**39**	**57**	**47**	23	20	**37**	**31**	**42**	**33**	**45**	20	**33**	**63**	**29**	**66**	**78**	**38**	27	**39**	**56**	**57**	**31**	22	**31**	**56**	**48**	**100**
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

*Expressed in 1/100ths with values in bold indicating statistically significance at the .05 level

The plot shows that the participants clearly divided themselves into two groups. Some participants (S24, for example) seemed, through appearance on the plot, to be close to the intersection of both factors but subsequent calculation showed that all participants fell exclusively into one of the two factors. It was determined that Factor A explained 39.516% of the variance in the sorts and Factor B explained 9.142% of the variance, with the total amount of the variance in the sorts explained by both factors being 48.658%.

To determine with certainty if participants fit into one, both, or neither of the identified factors calculations were performed to determine factor membership. A "pre-flagging algorithm" developed by Schmolck (2012) determines if a participant is a 'pure' member of a factor group. In order for a participant to be considered part of a factor two criteria needed to be met. First, $a^2 > h^2/2$ (the factor accounts for more than half of the common variance) where 'a' is the factor loading and 'h^2' is the sum of the squared factor loadings (Schmolck, 2012). The a values and the h^2 values were computed by the SPSS program. Second, a significant factor loading at either the $p<.01$ or $p<.05$ level is required. The standard error is calculated by dividing one by the square root of the number of sort items (47 for this study), for a result of .146. The value for p is then found by multiplying .146 by the selected level of significance, +/-2.58 for $p<.01$ (2.58 x .146 = .376) and +/-1.96 for $p<.05$ (1.96 x .146 = .286). As an example, Participant 1 had an "a" score of .650 and an a^2 score of .423 for Factor A, an "a" score of .102 and a .01 a^2 score for Factor B and an $h^2/2$ score of .213. Since .423 is larger than .213 (the h^2 score) and .650 is larger than .286 (the p-

value), Participant 1 was found to be a member of Factor A. Since .01 is smaller than both .423 and .102 is smaller than .286, Participant 1 was found not to be a member of Factor B. (The results of these calculations for all participants are found in Table 4.2.)

Demographic Characteristics of the Factor Group Members

Thirty principals participated in this study. Data analysis showed that the participants' sorts resulted in two groups, Factor A and Factor B. Sixteen participants were members of Factor A and fourteen were members of Factor B. Table 4.2 shows the participants' factor membership.

Table 4.2: Factor Significance and Membership

	Factor A		Factor B			Factor A	Factor B
Participant #	**a Score**	**a^2 Score**	**a Score**	**A^2 Score**	**$h^2/2$**	**Membership**	**Membership**
P1	.650	.423	.102	.010	.213	Member	
P2	.116	.013	.555	.308	.161		Member
P3	.300	.090	.427	.182	.137		Member
P4	.539	.291	.439	.193	.242	Member	
P5	.533	.284	.626	.391	.338		Member
P6	.552	.305	.470	.221	.263	Member	
P7	.575	.331	.064	.004	.168	Member	
P8	.693	.480	.090	.008	.245	Member	
P9	.731	.534	.141	.020	.278	Member	
P10	.688	.473	.291	.085	.279	Member	
P11	.193	.037	.468	.219	.128		Member
P12	.261	.068	.490	.240	.154		Member
P13	.519	.269	.510	.260	.265	Member	
P14	.688	.473	.202	.041	.257	Member	
P15	.612	.375	.381	.145	.260	Member	
P16	.432	.187	.720	.518	.353		Member
P17	.441	.194	.371	.138	.166	Member	
P18	.115	.013	.844	.712	.363		Member
P19	.037	.001	.843	.711	.356		Member
P20	.536	.287	.145	.021	.154	Member	
P21	.555	.308	.382	.124	.227	Member	
P22	.027	.001	.605	.391	.184		Member
P23	.431	.186	.663	.440	.313		Member
P24	.472	.223	.558	.346	.285		Member
P25	.736	.542	.161	.026	.284	Member	
P26	.731	.534	.138	.019	.277	Member	
P27	.560	.312	.207	.043	.178	Member	
P28	.304	.092	.718	516	.304		Member
P29	.082	.007	.550	.303	.155		Member
P30	.180	.032	.773	.598	.315		Member

The demographic information on the two factors was then separated out to further define who was in what group (See Table 4.3).

Factor A Demographic Composition

Factor A was split by gender, with 50% male and 50% female principals. 88% had been in their current position for less than five years, and only 13% (2 principals) had been in their current position for five years or more. Seven principals had less than five years of administrative experience, six had from five to ten years of administrative experience, and three had more than ten years of administrative experience. One principal (6%) had less than five years of teaching experience; the other fifteen (94%) had five or more years of teaching experience. The majority of the participants (7) were between 31 and 40 years of age. One was in the 20 to 30 age range; 25% (4) were in each of the 41 to 50 and the 51 to 60 ranges. Factor A was exactly split in special education background; eight had special education background and eight did not. Of the eight who did have special education background, two had a degree, certification, and prior employment in special education; three had prior employment and a degree; one had prior employment and certification; one had only prior employment; and one had only a degree in special education. Eleven (69%) of the principals had a master's degree plus 30 credits beyond the master's degree as their highest level of education and five (31%) had only a master's degree. Eight of the Factor A principals had taught in elementary school (50%), three in secondary (19%), and five in both (31%). Ten of the principals had taught only in general education, three in only special education, and three in both special education and general education. Of the participants in Factor A, 100% identified as white.

Of the Factor A members, 81% worked in districts of less than 3,000 students (19% in districts with more than 3,000 students) and 75% of them worked in schools with more than 350 students (25% in schools with less than 350 students). Factor A members were employed in school districts where 75% spent less than $13,500 per pupil, and 25% spent more than that figure on a per-pupil basis. Half of the participants had 10-20% of the budget spent on special education and the other half spent 20 to 30%. There was a wide spread in percentages of students with free and reduced lunches. The largest population of free and reduced lunch percentages was in the 30-40% range (five participants, 32%). Six participants had fewer students with free and reduced lunch than that amount and five had more. The data on the proficiency rate of students with disabilities on the ELA MCAS exam showed that 25% of the principals had proficient scores at less than 10% of the disabled student population, 25% of the principals had a proficiency rate of 10 to 20%, and 19% were at the 20 to 30% proficiency rate. One principal had a 30 to 40% proficiency rate, two were in the 60 to 70% proficient range, and two were not reported. On the mathematics MCAS, 56% of the principals had special education populations scoring proficient at less than 10% of the population. There were 2 principals (13%) in each of the following categories: 10 to 20% proficient, 20 to 30% proficient on the mathematics MCAS. Six percent (one principal) had students with disabilities scoring 30 to 40% proficient. The majority of the principals (10, 63%) were at Level 2 accountability status, with two principals at Level 1, three at Level 3, and one not reported. 13 (81%) of the Factor A participants had 10 to 20%

special education enrollment, two (13%) had 21 to 30%, and one (6%) had 30% or greater special education enrollment.

Factor B Demographic Composition

Factor B was composed of 64% males and 36% females. Sixty-four percent of the Factor B principals had been in their current position less than five years with 36% for five years or more. 21% had fewer than five years of administrative experience, 14% had between five and ten years of administrative experience, and 64% had more than ten years of administrative experience. Eighty-six percent of the Factor B principals had taught for five years or more, with 14% having taught for less than five years. Over half of the participants were between the ages of 41 and 50 (8, 57%). Four were between the ages of 31 and 40, one was between 51 and 60 and one was between the ages of 61 and 70. The Factor B participants were evenly split in their special education background, 50% with and 50% without prior special education experience. Of those with special education experience, 3 (21%) had prior employment, a degree, and certification in special education. There was one participant in each of the following categories: prior employment and degree, prior employment and certification, prior employment only, and degree only. 21% of the Factor B participants had a master's degree as their highest level of education, 57% had a master's degree plus 30, and 21% had a doctorate. Seven percent of the participants had taught in elementary, 57% in secondary, and 36% in both. Fifty-seven percent had taught in general education only, 14% in special education only, and 29% in both general and special education. Eight of the Factor B participants

were white, one was African-American, two were Hispanic/Latino, and one identified as both white and Hispanic/Latino.

Sixty-four percent of the principals in Factor B worked in districts with enrollments less than 3,000, and 36% worked in districts with enrollments more than 3,000. Sixty-four percent worked in schools with more than 350 students, with 36% in schools with less than that number of students. Fifty-seven percent of the districts spent less than $13,500 in a per pupil basis, while 35% spent more than $13,500 per pupil and one school (7%) did not have a reported per-pupil number. Six participants (43%) had 10 to 20% of their budget spent on special education; eight (57%) 20 to 30% of their budget for special education. Nearly half of the principals (43%) had free and reduced lunch percentages of 20 to 30%, with 21% below than range, 28% above it and one (7%) not having a reported figure. 8 participants had students with disabilities scoring 20 to 30% proficient or better on the ELA MCAS, including one score of 80% or greater. Two scores were below that mark and two scores were not reported. Six participants had students with disabilities scoring at or above 20 to 30% proficient, including one 50 to 60% proficient. There were two with less than 10% proficient, four 10 to 20% proficiency, and two not reported. For accountability status, 36% were Level 1, 43% were Level 2, 14% were Level 3 and 7% were not reported. Two participants in Factor B had special education enrollment percentages of less than 10%, ten (71%) were between 10 and 20% of special education enrollment, one was 21 to 30% and one was 30% or greater.

Demographic information that showed differences between Factor A and Factor B are noted with an asterisk in Table 4.3.

Table 4.3: Demographic Information for Factor A and B

		Factor A		Factor B	
		N = 16	**%**	**N= 14**	**%**
Gender	Male	8	50%	9	64%
	Female	8	50%	5	36%
Years In Current Position	Less than Five	14	88%	9	64%
	Five or More	2	13%	5	36%
Years of Administrative Experience*	Less than Five	7	44%	3	21%
	Five to Ten	6	38%	2	14%
	More than Ten	3	19%	9	64%
Years of Teaching Experience	Less than Five	1	6%	2	14%
	Five or More	15	94%	12	86%
Age*	20 to 30	1	6%	0	0%
	31-40	7	44%	4	29%
	41-50	4	25%	8	57%
	51-60	4	25%	1	7%
	61-70	0	0%	1	7%
Special Education Background	Yes	8	50%	7	50%
	No	8	50%	7	50%
Type of Special Education Experience	None	8	50%	7	50%
	Prior employment, degree, certification	2	13%	3	21%
	Prior employment, degree	3	19%	1	7%

		Factor A		Factor B	
		N = 16	**%**	**N = 14**	**%**
Type of Special Education Experience	Prior employment, certification	1	6%	1	7%
	Prior employment	1	6%	1	7%
	Degree	1	6%	1	7%
Highest Level of Education*	Master's Degree	5	31%	3	21%
	Master's Plus 30	11	69%	8	57%
	Doctorate	0	0%	3	21%
Level of Teaching History*	Elementary	8	50%	1	7%
	Secondary	3	19%	8	57%
	Both Elementary and Secondary	5	31%	5	36%
Type of Teaching Experience	General Education	10	63%	8	57%
	Special Education	3	19%	2	14%
	Both General and Special Education	3	19%	4	29%
Ethnicity*	White	16	100%	10	71%
	African-American		0%	1	7%
	Hispanic/Latino		0%	2	14%
	White and Hispanic/Latino		0%	1	14%
District Enrollment	Less than 3,000	13	81%	9	64%
	More than 3,000	3	19%	5	36%
School Enrollment	Less than 350	4	25%	5	36%
	More than 350	12	75%	9	64%

		Factor A		Factor B	
		N = 16	**%**	**N = 14**	**%**
Per Pupil Spending (District)	Less than $13,500	12	75%	8	57%
	More than $13,500	4	25%	5	36%
	Not Reported	0	0%	1	7%
Percentage of Budget Spent on Special Education	10 to 20%	8	50%	6	43%
	20 to 30%	8	50%	8	57%
Percentage of Students with Free and Reduced Lunch	Less than 10%	2	13%	2	14%
	10 to 20%	2	13%	1	7%
	20 to 30%	2	13%	6	43%
	30 to 40%	5	32%	2	14%
	40 to 50%	3	19%	0	0%
	60 to 70%	0	0%	1	7%
	70 to 80%	2	13%	1	7%
	Not Reported	0	0%	1	7%
Percentage of Students with Disabilities Scoring Proficient on the ELA MCAS*	Less than 10%	4	25%	1	7%
	10 to 20%	4	25%	1	7%
	20 to 30%	3	19%	2	14%
	30 to 40%	1	6%	3	21%
	40 to 50%	0	0%	0	0%
	50 to 60%	0	0%	3	21%
	60 to 70%	2	13%	1	7%
	80% or Greater	0	0%	1	7%
	Not Reported	2	13%	2	14%
Percentage of Students with Disabilities Scoring Proficient on the Mathematics MCAS*	Less than 10%	9	56%	2	14%
	10 to 20%	2	13%	4	29%
	20 to 30%	2	13%	2	14%
	30 to 40%	1	6%	3	21%
	50 to 60%	0	0%	1	7%
	Not Reported	2	13%	2	14%

		Factor A		Factor B	
		N = 16	**%**	**N = 14**	**%**
Accountability Status*	Level 1	2	13%	5	36%
	Level 2	10	63%	6	43%
	Level 3	3	19%	2	14%
	Not Reported	1	6%	1	7%
Special Education Enrollment Percentage	Less than 10%	0	0%	2	14%
	10 to 20%	13	81%	10	71%
	21 to 30%	2	13%	1	7%
	30% or Greater	1	6%	1	7%

Demographic Similarities Between Factors A and B

There were some similarities between the factors. A large majority of the members of both factors had five or more years of teaching experience. Both factors were split exactly in half between principals with special education backgrounds and principals without special education backgrounds. The special education participants in each group had very similar splits among the types of special education background that they possessed before becoming principals. The types of teaching experience were similar – over 50% of each factor had only general education experience, and between 20 and 30% of each factor had either special education only or general and special education experience. Both factors tended to work in small districts (districts with less than 3,000 students enrolled: 81% = Factor A, and 64% = Factor B) and in larger schools (Schools with more than 350 students: 75% Factor A, 64% Factor B). Per pupil spending was similar, with more of each factor spending less than $13,500 than more that that number. Free and reduced lunch percentages were similar, with most student populations being under 40% and a few as high as 70 to 80%. The percentage of the budget spent on special

education was summarily divided across the 20% line: 50% above and 50% below for Factor A, and 57% above and 43% below for Factor B.

Demographic Differences Between Factors A and B

There were many differences between the members of Factor A and Factor B. Only 2 members (13%) of Factor A had been in their current position for five years or more while five members (36%) of Factor B had been in their positions for that amount of time. Factor A tended to be younger than Factor B. The only participant in the 20 to 30 years age range was in Factor A, while the largest singe grouping of Factor A participants was in the 31-40 range (44%). Factor B, in contrast, has the oldest participant, the only person to fit in the 61 to 70 age range, and their largest single grouping was 41 to 50 years old (57%). Factor B tended to have more education than Factor A. Factor B included all three participants with a doctorate degree, and had fewer members with just a master's degree than did Factor A (21% verses 31%). Factor A was entirely white, while Factor B was more diverse, with all four participants of minority background sorting into that grouping.

There was a stark difference in the teaching background of the members of the two factors. Factor A had 81% of its members reporting prior elementary (50%) or elementary and secondary (19%) experience, with only 19% reporting just secondary experience. Factor B was almost exactly opposite, with 93% of its members reporting only secondary (57%) or elementary and secondary (36%) experience, and only 7% reporting just elementary experience.

Students with disabilities of Factor B principals tended to perform better on the MCAS assessments. On the ELA assessment, 25% of the schools from Factor A

had less than 10% proficiency, while only 7% of Factor B schools had less than 10% proficiency. Only two schools in Factor A scored higher than 40% proficiency rate on the ELA test. Five schools in Factor B scored higher than 40% proficiency rate. Factor B also had the highest proficiency percentage at 80% or greater. For the mathematics MCAS, 56% of Factor A schools had less than 10% proficiency for students with disabilities, while only 14% of Factor B schools had this same low proficiency rate. Only 19% of Factor A participants had schools with mathematics proficiency rates over 20%; 42% of Factor B schools achieved an over 20% proficiency rating for students with disabilities. Factor B had the highest overall proficiency percentage at 50 to 60%.

Factor B participants tended to work at schools with a lower accountability status than Factor A participants. 13% of Factor A principals worked at Level 1 schools, while 36% of Factor B principals worked at Level 1 Schools. 19% of Factor A schools were Level 3 schools while 14% of Factor B schools were at Level 3. Factor B schools also tended to have lower special education enrollment percentages. No schools in Factor A had less than 10% special education students, while 14% of Factor B members were below 10% special education enrollment. For both factors the majority of the participants (81% and 71%, respectively) were in the 10 to 20% enrollment range, but Factor A had 19% of participants in schools with an enrollment percentage of special education students greater than 20% while Factor B had 14% of participants with enrollment percentages greater than 20%.

Defining the Factors

The statements from the Q-sort were ranked according to principle component scores according to each factor, showing how each factor ranked the individual items. Table 4.4 shows how the items were ranked comparatively for both Factor A and Factor B. The factor score is the average numerical rank given to that item by the members of each factor, and the number in parenthesis is the rank order given to that number be each factor, from 1 (highest) to 47 (lowest).

Table 4.4: Factor A and B Item Rankings

Item #	Leadership Statement	Factor A factor scores (N=47)	Factor B factor scores (N=47)
1	Ensure there are well-functioning special education leadership teams	.71055 (12)	-.99155 (36)
2	Ensure members of the special education teams have clear goals	1.30904 (6)	-1.43880 (44)
3	Ensure members of special education teams have clear roles and responsibilities	.46970 (14)	-1.22282 (40)
4	Ensure members of the special education teams prioritize tasks they have to perform	.22453 (21)	-1.42976 (43)
5	Ensure the special education team supports the district goals	-.10786 (30)	-1.07218 (38)
6	Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members	1.69376 (2)	-.78378 (34)
7	Provide educators with time to address the most important needs of students with disabilities	.92469 (9)	-.46111 (30)
8	Support open communication	.13835 (24)	1.59378 (1)
9	Promote a professional collegial atmosphere	.74229 (11)	1.32589 (4)
10	Assist special educators on analyzing appropriate interventions	1.39540 (4)	-1.74931 (47)
11	Collaborate with teachers on professional development	.05383 (25)	.08119 (25)
12	Hold high expectations for staff performance	1.17760 (7)	1.30589 (5)

13	Engage teachers in formal and informal discussions of instruction as it impacts student achievement	.83865 (10)	1.33085 (3)
14	Communicate instructional goals	.35048 (18)	.79609 (13)
15	Encourage discussion of instructional goals	.40225 (16)	.22254 (24)
16	Maintain high faculty morale	-.03085 (27)	.60014 (18)
17	Establish an orderly environment for learning	-.08384 (28)	.67059 (17)
18	Develop school goals	.40974 (15)	.68105 (16)
19	Systematically observe teachers' instructional methods	1.85426 (1)	-.39674 (29)
20	Help staff members improve their instructional effectiveness	1.58230 (3)	.42621 (21)
21	Involve staff in critical instructional decisions	.13865 (23)	1.51868 (2)
22	Report academic progress to the community	-.67643 (36)	-.73600 (33)
23	Secure resources necessary to support the instructional program	.96065 (8)	-.37772 (28)
24	Evaluate the curricular program	1.37871 (5)	-1.42538 (42)
25	Provide others with assistance in exchange for their efforts	-.51147 (35)	-1.58230 (46)
26	Discuss in specific terms who is responsible for achieving performance targets	.47584 (13)	-.92004 (35)
27	Make clear what staff can expect to receive when performance goals are achieved	-.93128 (39)	-1.02124 (37)
28	Show firm belief in "If it ain.'t broke, don.'t fix it."	-1.90739 (45)	-1.53519 (45)
29	Ensure that behavior is predictable and consistent	-1.38592 (42)	.76686 (14)
30	Direct attention toward failures to meet standards	-2.17717 (47)	-.47654 (31)
31	Express satisfaction when others meet expectations	-.41567 (34)	.02533 (26)
32	Focus attention on irregularities, mistakes, exceptions, and deviations from the standards	-1.45414 (43)	-1.28977 (41)
33	Maximize staff performance using formal roles and responsibilities	-1.17721 (41)	.23933 (23)
34	Concentrate attention on dealing with complaints	-1.52616 (44)	-1.10013 (39)
35	Talk optimistically about the future	-.77996 (37)	.52950 (19)
36	Talk enthusiastically about what needs to be accomplished	-.86198 (38)	.95569 (9)
37	Articulate a compelling vision of the future	.33991 (19)	1.15781 (7)

38	Express confidence that goals will be achieved	-.36772 (32)	.38448 (22)
39	Talk about the most important values and beliefs	-.08778 (29)	.90152 (11)
40	Specify the importance of having a strong sense of purpose	-.39545 (33)	.80339 (12)
41	Consider an individual as having different needs, abilities, and aspirations from others	.28970 (20)	-.05117 (27)
42	Help others to develop their strengths	.36536 (17)	.45473 (20)
43	Consider the moral and ethical consequence of decisions	-.02464 (26)	1.28343 (6)
44	Use symbols (metaphors, ceremonies) to develop meaning for staff	-1.16603 (40)	-.63745 (32)
45	Serve as a role model for staff to emulate	-.20651 (31)	.93596 (10)
46	Tell stories to share important values	-2.09699 (46)	.98875 (8)
47	Develop school culture over time	.14619 (22)	.71929 (15)

Factor A Rankings

Factor A members' factor scores ranged from 1.85 to -2.18. This group of principals highly rated items (19, 6, 20, 10, 24, 2, 12, 23) that emphasize observing teachers, providing mutual support, instructional effectiveness, assistance for special educators, evaluating curriculum, ensuring clear goals for special education, having high expectations for staff, and securing resources (See Table 4.5). Two of these items were distributed leadership items (2 and 6), and six (19, 20, 10, 24, 12, 23) were instructional leadership items. The lowest-ranked items for Factor A (30, 46, 28, 34, 32, 29, 33, 44) emphasized directing attention to failures, telling stories, having a laissez-faire attitude, concentrating on complaints, focusing on mistakes, ensuring predictable behavior, maximizing staff performance, and using symbols to develop meaning. Six of these statements (30, 28, 34, 32, 29, 33) were transactional leadership items and two (44, 46) were transformational leadership items.

Table 4.5: Factor A Lowest and Highest Rated Statements

High Item #	Statement	High Score	Low Item #	Statement	Low Score
19	Systematically observe teachers' instructional methods	1.85426 (1)	30	Direct attention toward failures to meet standards	-2.17717 (47)
6	Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members	1.69376 (2)	46	Tell stories to share important values	-2.09699 (46)
20	Help staff members improve their instructional effectiveness	1.58230 (3)	28	Show firm belief in "If it ain.'t broke, don.'t fix it."	-1.90739 (45)
10	Assist special educators on analyzing appropriate interventions	1.39540 (4)	34	Concentrate attention on dealing with complaints	-1.52616 (44)
24	Evaluate the curricular program	1.37871 (5)	32	Focus attention on irregularities, mistakes, exceptions, and deviations from the standards	-1.45414 (43)
2	Ensure members of the special education teams have clear goals	1.30904 (6)	29	Ensure that behavior is predictable and consistent	-1.38592 (42)
12	Hold high expectations for staff performance	1.17760 (7)	33	Maximize staff performance using formal roles and responsibilities	-1.17721 (41)
23	Secure resources necessary to support the instructional program	.96065 (8)	44	Use symbols (metaphors, ceremonies) to develop meaning for staff	-1.16603 (40)

The qualitative data recorded during the post-sort interviews provided context for these high and low rated items. The principals in this factor were focused on improving instruction and outcomes for students, improving teacher effectiveness, and meeting the needs of students.

Table 4.6: Rationale of Factor A Members for Highest Ranked Items

Factor A High Item#	Statement	Reason
19	Systematically observe teachers' instructional methods	• In the work I'm currently doing, we are a school that is very underperforming so I'm really trying to get into classrooms and do walkthroughs and provide feedback for staff on how to improve their methods. • I think systematically observing teachers and instructional methods - that's going to support instruction. That's going to help them because my belief is that the bottom line is that the teachers delivering the instruction is what's most important. So if I can support them with their instruction then that's going to make a difference. • This is my third year here. I came in at the same in at the same time as the superintendent, so we essentially came in as a team, because there are only two schools in the district. And two of the… as we came in, two of the areas where we felt the district was lacking was a sense of purpose that we needed to reinvigorate and we had a very well established staff who had been receiving essentially check-mark evaluations for years. So those are two areas that were concentrated on early on and continue to be a focus.

6	Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members	• When you walk into our building it says our commitment, teaching all students, every day, every child, every day, every way. So, for us, we need all staff to be on board with what the needs are for all students. It's not, this is my student, and this is the special ed student, and so that is something that we're really working on this year is teaching all our students. • It talked about mutual support, and the advice and understanding of all staff members. So when we make decisions on students, it's important to me that we, A, give people the time and also to make sure that all voices are heard. When we go to meetings, when we discuss students that we make sure we get the best information available by using the people who are working with these students. • If we all have shared insight on a child, and how a child learns, and how a child learns best, and if we don't make time to talk about that together and to work on student success together, I think it's impossible for anybody to think they can do that by themselves. So I also think that teachers are having the most fun and enjoyment in their job when they are talking about teaching and talking about a shared goal around a child that they're working on together because often that results in a success and a victory and when you start to get those little victories, those little successes, particularly with kids you've supported, they just absolutely… you just feel such fulfillment in whatever your role is, be it classroom teacher, interventionists. It strengthens relationships, brings a totally different affect to the work, so to me this ripples into all of this.

20	Help staff members improve their instructional effectiveness	• My background is all about curriculum and instruction so I'm not surprised that would be on the far end for me. • So, the most important effect that we can have is teacher effectiveness, instructional strategies that will help teach kids. I mean, that's the secret!
2	Ensure members of the special education teams have clear goals	• Number 2 was ensure members of the special education teams have clear goals. Yeah, exactly, piggybacking on my initial statement. I think we have to be purposeful, we have to be focused on tasks, providing more explicit instruction to meet the needs of out learners. That is through the goal setting process.
12	Hold high expectations for staff performance	• I felt like, you know, vision can help, people can align their resources towards that vision, and high expectations, people rise to, so if we hold those expectations and have that vision it will be the most bang for the buck.

The members of the Factor A group ranked items low because they did not want to have a negative focus in their work, felt that some items simply did not meet their personal leadership style, and they wanted to be proactive and not complacent.

Table 4.7: Rationale of Factor A Members for Lowest-Ranked Items

Factor A Low Item#	Statement	Reason
30	Direct attention toward failures to meet standards	• I do look at things that may be challenges for people, but I have a hard time with the word failure. I think it more may be challenges for people and something that we need to work on. • I think the wording of it was negative. And so I thought, and maybe you know I

		just look at that differently, if we are not performing at a certain level or of there's some gaps in our instruction, I guess I share that with staff in a very different way so, it's more of in a positive, you know, here's the information how are we together going to deal with that issue. What do we need to do to kind of remedy that? So, I guess for me, I don't direct attention towards failures, I guess if we are going to, we certainly look at them, but I guess I don't word them in the negative. • I just don't believe in deficit perspectives. I think that everything needs to be built on a strength perspective, a strength-based perspective. So, for example, if you have a student who is typically described as below grade level or they aren't meeting the grade level benchmark, my turn on that for teachers in our building is that it is more important for us to understand where kids are and where they're going next, and communicating that with families and each other. It's a much more powerful tool them spending your time on what kids are not.
46	Tell stories to share important values	• It just, out of all the things that were here, it just didn't strike me as something that would be… I guess it struck me that telling stories to share important values might be viewed as lecturing or negative. • I'm not a good storyteller so that's not really how I share values.
34	Concentrate attention on dealing with complaints	• If I focused all my attention on complaints we would ever get anywhere, in my opinion. Not to say that we don't value complaints, I think that we have to look at every one that comes our way. We have to take it seriously. I mean we look at the source, we look at the validity of it and we move on, either way. Having said that, I do think there's always opportunities to

		improve and its through feedback that we appreciate the current level of where we're at with regards to making instructional practices with the students best interests in mind. • I guess I try not to deal with complaints too often. Or, I guess it's not that I try to, when complaints are brought to my attention I deal with them, but in the spectrum of everything that's here, I try very hard to be proactive if there is something that needs to be addressed to do that in a team manner. But the attention is on being proactive, making sure again that there is time given to staff, and that they're problem solving and working together • I've gotten better over the years and realized that just dealing with the complaints will drag you down, you just need to focus on the vision and essentially this year it's been even more streamlined because the evaluation process and the goals that we are able to set.

In speaking generally about their sorts, the members of Factor A, in their follow-up interviews, repeatedly returned to themes of instruction, curriculum, and student improvement. One participant described her sort as "anything that was focused on improving instruction and improving the instructional program." They wanted to use their observations of teachers to determine the need for improvements and allocate resources and training to alleviate those needs (Statements 19, 20). "I believe that the bottom line is what's happening in that classroom and what instruction is being delivered by the teacher. They're the point

person. What happens there makes all the difference one way or the other.“ One participant referenced statements 12, 6 and 20 by stating “So this was all about instruction and how to we look at instruction, how do we look at our strengths, how to we have well-functioning teams, how do we have an orderly environment for student learning, how do we hold staff expectations. This is the guts of what it means to be a principal and to have leadership in a building.” Statements 23 and 20 were referenced in this quote that clearly shows the instructional leadership orientation of the Factor A members: “So, whether it is trying to get resources for academic materials, you know, trying to talk positively about change and what we’re trying to achieve, really it was focused on improving instruction in the hopes of eventually improving student achievement.”

The members of Factor A attributed their low rankings for items based on personal preference, school situation, and a preference for instructional leadership over other forms. “Not that they were less important, but they’re things that I’m not great at personally. So talk optimistically about the future, that’s not something I’m, you know, I feel I’m stuck in ‘we need to go here, ‘not ‘we’re going to get there.’” said one. Another Factor A participant added that they based their rankings on their school needs: “I wonder too if I were in a different place, a different building with different staff if this would change for me personally. Because a lot of these things are very personal to me. They’re things that I believe in, but some of there are just, these are some of the things that I’m working on this year with this group of people and that’s where we are with the students, so I guess I was interested in how that would play out if I were in a different building.” Another said in a similar vein: “I’ll

say that maintaining faculty morale and talking optimistically about the future, I think are important and are keys to being successful and not letting those go, but I don't think they're necessarily where at lest I'm at right now in terms of defining myself as a leader in the building." One participant put the negative-side items in stark terms:

> I thought the ones at the negative end were more about more touchy-feely type things, not based necessarily on data and sound practice. They're nice things to do, like talk enthusiastically about what needs to be accomplished, that's certainly nice, but enthusiasm isn't going to do it alone, you have to have a plan. You can talk enthusiastically about anything but if you don't have a plan that's matched to your data and the student you have in front of you that's a useless card.

Factor A participants tended to emphasize instruction over all other, 'touchy-feely' leadership aspects, attributing this to the specific needs within their buildings.

Factor A and Special Education

Qualitative data was collected during the interviews about the principals' perceptions of the special education services in their buildings. The principals in Factor A were split on their opinion of the special education outcomes in their schools. Nine offered positive appraisals of their special education outcomes and seven offered negative or qualified responses, usually including how they were trying to improve them. The special education background of the participants did not make a difference in answering this question on the perception of special education outcomes; half of the principals with special education background answered positively and half of them answered negatively.

Factor A principals in both groups used data to justify their interpretation of their special education outcomes. They cited their accountability status, MCAS

results, referral numbers, and the amount of programs they offer the amount of programs they offer to justify both positive and negative impressions of the outcomes. In addition, principals who offered negative interpretations in two cases mentioned teacher attitudes towards special education as an obstacle: "That's part of the cultural shift, is shifting teachers to really even think that kids who have disabilities even can achieve a proficient or advanced on an MCAS. I had one teacher say we can't possibly expect that of them. So I'm trying to push for, not just higher test scores but more inclusion. There's been some exclusive practices that I'm trying to remedy" and "I'd like to see a little more progress with getting children to that point where they can be more mainstreamed. But I think that's part of my work as a leader to work with teachers and get them to a level where they're more comfortable about their instruction and the ability for the child to be successful on their own."

The participants were also asked what the greatest help and greatest obstacle were for their special education outcomes. Tables 4.8 and 4.9 show the results.

Table 4.8: Factor A Greatest Help in Special Education

Help	# Principals	%
Staff/Faculty	11	69%
Resources	3	19%
Special Education Director	1	6%
Programs	1	6%

The members of Factor A believe that it is the people that make the difference for their special education students, with staff, faculty, and special

education director combining for 75% of responses. Resources and the availability of specialized programs, which are clearly connected (since adequate resources leads to the funding of programs) account for the other 25%.

Table 4.9: Factor A Greatest Obstacle in Special Education

Obstacle	# Principals	%
Resources/Budget	5	31%
Time/Scheduling	3	19%
Low Expectations	2	13%
Regular Education Teachers' Beliefs	1	6%
Programs	1	6%
Parental Support	1	6%
Keeping Staff Current with Research	1	6%
Inclusion Planning Time	1	6%
Special Education Director	1	6%

The responses for greatest obstacle were more diverse. Only resources and budget appeared in more than 25% of responses. The principals who answered parental support, special education director, and inclusion planning time mentioned that these problems were entirely unique to their building or district and did not think they would be a problem in other school locations.

The principals with special education background were also asked how they felt their special education background impacted their sorting of the cards. Table 4.10 shows the responses for the Factor A principals.

Table 4.10: Factor A Special Education Principals On How Their Background Impacted Their Sorts

I don't know how to quantify that. I would say it's somewhat important. Some of the work I'm doing here right now really does stem from my perspective on special ed because I've noticed that there's a real depressed level of understanding on special education here, compared to where I was before and so I'm really trying to really

improve even the general educators' understanding of special education and what their roles and responsibilities are.
I don't know if it was. I think it's hard to tease out for me. What influence my special education background has versus my overall view of things. You know, I firmly believe good teaching is good teaching. And I'm not sure that's tied to, you know, when I moved from special ed to regular ed, trust me I was still using all those good strategies, so, I'm not sure there's, you know, I was even at that RETELL class last night, and they were talking, and I was like, that's good teaching. Good teaching is good teaching. So, I'm not sure, maybe that background because I get that, influences my general outlook.
I think it's a big factor because when I look at the cards, a lot of them are about interpersonal skills. And I think that came from the special ed background.
Well, I started out as a special education teacher, I've been a special education teacher for many years, I've always worked with at-risk. I'd say that it had a lot to do with how I probably put things down. Maybe part of it was taking, trying to think of the role of the teacher and why those are important, the collaboration, the resources necessary to import the instruction, the discussion of the instructional goals, developing their strengths in the learning I think that's important because as a special ed teacher I always tried to learn new things and I tried to collaborate with other teachers and professional development was a huge part of what I did as a special education teacher. I always felt that if the children weren't learning that is was my responsibility to find a way to get them to learn in a different way and that had a lot to do with professional development.
It definitely formed my positives. Having a special education background impacted how I looked at I would say my plus fours and plus fives dramatically.
I don't know. I mean, one thing I feel like for special education is it's really best practices for regular education. It really is not that huge a difference, it's just if you had the resources for everybody you would serve a kid that way. So I think I do have that lens in looking at issues with kids. I actually think sometimes it's a struggle having that background because sometimes some regular ed folks can question kind of, why are you putting all these resources to one person, or you know, it's because that's what the kid needs and not necessarily what we have or whatever.
I'm not really sure if it came into play all that much. You know, I think whether my background is special ed or if it was something else I feel that leadership kind of crosses those boundaries and it was more about my leadership style than my special ed background when I placed these.
I think that everyone that's an administrator should be special ed certified. Because I think they make the best administrators. Because the training for most administrators I've met is curriculum, and not teaching curriculum to kids, and so my background is that I spent, I'm an odd secondary person because I have also taught in the elementary school where that's student-centered, and so the high school training has always been curriculum-centered. So you need to merge those. You teach curriculum to students. And so I feel blessed that I got that special ed background because I look at things that way.

Five of the eight principals with special education background in Factor A spoke positively about their special education background impacting their sorts. They mentioned their backgrounds as impacting their interpersonal skills, leadership strategies and approach to curriculum. These five represented the following types of special education background: one with a degree, certification, and previous employment; two with a degree and previous employment; one with a degree; and one with previous employment. The three who did not believe that special education experience impacted their sorts downplayed the 'special' in special education, stating that special education was simply another way to describe general good teaching or that it did not have a great impact on their leadership style. These three came from the following types of special education background: one with a degree, certification, and previous employment; one with certification and previous employment; and one with a degree and previous employment.

Factor A Summary

Factor A members were generally young, with few years of experience in administration and in their current position. They tended to have a lower level of education, to have been predominantly elementary-level teachers, and the entire group was of white ethnicity. Their schools featured more students with free and reduced lunch, poorer proficiency rates on the MCAS for students with disabilities, and a higher special education enrollment percentage. Factor A members valued instructional and distributed leadership items in their sorts, showing preference for items that were focused on improving instruction and outcomes for students, improving teacher effectiveness, and meeting the needs of students. They gave low

ratings to transactional and transformational items and did not want to have a negative focus in their work, felt that some items simply did not meet their personal leadership style, and they wanted to be proactive and not complacent.

As revealed in their interviews, Factor A members felt that instruction, curriculum and student improvement were the main goals for their leadership. The focus of all their efforts was to improve student outcomes, and whatever they did with teachers, resources, and curriculum was designed to ultimately improve student results. They felt that transformational statements were luxuries that they could not afford in their generally lower-achieving schools where their focus was on turn-around and student improvement. They felt that this was due to their school situations and not necessarily an innate leadership characteristic, but one that they felt was required in their current position. Factor A principals did not want to be negative and transactional, but they also did not show appreciation for transformational leadership as an inspiring method for improving student outcomes.

Factor A members did not have consistency in their beliefs about their special education student outcomes, with nine feeling positive about them and seven feeling negative. Even though only three of the schools had ELA MCAS proficiency percentages for special education students over 30% and only one over 30% for mathematics, over half principals in this factor still tended to believe that they were succeeding with their special education population. They overwhelmingly felt that their faculty and staff were the biggest asset for their special education outcomes while believing that resources and time were the largest

obstacles. The principals with special education background in Factor A were divided, with five believing that their background influenced their leadership and sorts and three believing that there wasn't much 'special' about special education.

Factor B Rankings

Factor B members' factor scores ranged from 1.59 to -1.75. This group of principals highly rated items (8, 21, 13, 9, 12, 43, 37, 46) that emphasize communication, involvement with staff and collegiality, ethics and values, and vision (See Table 4.11). Two of these items are distributed leadership items (8 and 9), three were instructional leadership items (12, 13, 21) and three were transformational leadership items (37, 43 and 46). The lowest-ranked items for Factor B (10, 25, 28, 2, 4, 24, 32, 3) emphasized working with the special education teams, having laissez-faire attitudes, engaging in transactional agreements, focusing on mistakes, and evaluating curriculum. Four of these statements were distributed leadership items (2, 3, 4, 10), one was an instructional leadership item (24), and three were transactional leadership items (25, 28, 32).

Table 4.11: Factor B Lowest and Highest Rated Statements

High Item #	Statement	High Score	Low Item #	Statement	Low Score
8	Support open communication	1.59378 (1)	10	Assist special educators on analyzing appropriate interventions	-1.74931 (47)
21	Involve staff in critical instructional decisions	1.51868 (2)	25	Provide others with assistance in exchange for their efforts	-1.58230 (46)

13	Engage teachers in formal and informal discussions of instruction as it impacts student achievement	1.33085 (3)	28	Show firm belief in "If it ain.'t broke, don.'t fix it."	-1.53519 (45)
9	Promote a professional collegial atmosphere	1.32589 (4)	2	Ensure members of the special education teams have clear goals	-1.43880 (44)
12	Hold high expectations for staff performance	1.30589 (5)	4	Ensure members of the special education teams prioritize tasks they have to perform	-1.42976 (43)
43	Consider the moral and ethical consequence of decisions	1.28343 (6)	24	Evaluate the curricular program	-1.42538 (42)
37	Articulate a compelling vision of the future	1.15781 (7)	32	Focus attention on irregularities, mistakes, exceptions, and deviations from the standards	-1.28977 (41)
46	Tell stories to share important values	.98875 (8)	3	Ensure members of special education teams have clear roles and responsibilities	-1.22282 (40)

The qualitative date recorded during the post-sort interviews provided context for these high and low rated items. The principals in Factor B were communicating with and supporting teachers, having a positive and collegial school environment, and articulating a vision to move the school forward.

Table 4.12: Rationale of Factor B Members for Highest Ranked Items

Factor B High Item#	Statement	Reason
8	Support open communication	• I think the things that are most important to me, that I try to also model is the open communication for staff. I want them communicating just as I communicate things with them. • I believe in two things when it comes to schooling: that everything is an ongoing dialogue and so communication is critical, that's communication between teachers and students, students and their families, administrators and teachers.
21	Involve staff in critical instructional decisions	• I also know how important and the value of involving all and everyone when it comes to making decisions regarding instruction. I know that we have folks that, basically, everyone brings a lot to the table and I really value listening to everyone and taking some of those really good ideas and making decisions based on what people are bringing to the table. So I value their professionalism and that's why that's important that I have everyone's views, stakeholders, teachers.
13	Engage teachers in formal and informal discussions of instruction as it impacts student achievement	• One of our focuses has been how to provide more opportunities for teachers to discuss what they do in their classrooms and learn from each other. • So I consider the most important job of a principal is to support the teachers as being better at what they do. So for everything else that you have to do, where the rubber meets the road is making teachers better.

9	Promote a professional collegial atmosphere	• Promote professional collegiality; again, I think if you can take care of the foundation then everything else will hopefully start taking care of itself. So having a place where people are actually excited to come you can attract some of the best teachers, inevitably it will help you with teaching and learning in order to have the kids succeed academically. • I think that the small learning community which we're in, if you're not all getting along, or you're not on the same page and you can't actually treat each other with respect and support it's a huge, you aren't going to get to those other places you need to go.
12	Hold high expectations for staff performance	• Hold high expectations, inevitably that's what I think gets the students to progress at the highest level, the high expectations and everything. So I though that was kind of all-encompassing. Not only does it allow the students to progress academically and socially but also allows for a good work environment where people want to come to. So I thought it was two-fold. • Because I think holding your own personal expectations as high gives you a baseline as to how you're going to hold others to those expectations.
37	Articulate a compelling vision of the future	• I've always said leadership starts with vision, goals, understanding where you are now and where you want to be tomorrow. • And articulating a vision for the future, if you can't articulate that then, you know, how can you lead if you don't know where you're going type thing. • Yes. I think that you need to have a vision. As an educational leader I think you need to set a vision and a course of focus for

		your school community, for the teachers, support staff, parents, students. I think it's really important. And once you develop your vision then you can start setting out goals and benchmarks to see where you're heading.

The members of Factor B ranked items low because they did not put special emphasis specifically on special education or any other specific instructional area of the school, wanted to be proactive about school improvement, and did not want to have a negative focus to their leadership.

Table 4.13: Rationale of Factor B Members for Lowest-Ranked Items

Factor B Low Item#	Statement	Reason
10	Assist special educators on analyzing appropriate interventions	• I'm not talking to special educators about analyzing interventions for individual students because I trust that as professionals individual special educators can do that on their own. They don't need the principal telling them how to do their job. Do I assist them with it? Sure. But of all the things I'm doing it's just further down on the scale.
25	Provide others with assistance in exchange for their efforts	• I really view myself as someone who is fair and in trying to be very consistent based on all the other things I'm trying to do I will make sure that I will give attention to everyone. And in fact, if people really aren't, if I have two teachers who, you gave me the example earlier, is I have two teachers and one of them isn't really putting the effort and another one is, I'd be more concerned about the one that isn't putting effort and I'd want to give that person just as much attention. • We try to assist everybody, no matter if their effort it questioned or not, and if it is questioned and it doesn't improve then

		we try to remove them. So that's something, its just for that and that's not what we're about.
24	Evaluate the curricular program	• I don't see myself as evaluating our curricular program that much. Not that I wouldn't want to, I just don't see it as the day-to-day work. And that might just be what I think of as what that says, because you know we're looking at schedules, what particular curriculum has worked for us, but not on a significant level. I think it's important work though, but it's not necessarily the work I do.

Factor B principals, in their follow-up interviews, tended to elaborate on themes of communication, culture and teacher support in discussing their positively-rated items. "Collaboration and communication, and involving staff in decision making. As well as having a clear idea about the vision and the future and the goals of the school," said one participant about what they valued in their sort, echoing cards 8, 21, 12, and 37. One principal specifically said he considered himself a transformational leader and rated items that seemed transformational on his positive side of the sort grid. "I think it's a theme of helping teachers be the best they can possibly be. My belief system is that you help that by having a positive climate when they come into to work, telling them the job that needs to get done, and then helping them do their job," said another Factor B principal (statements 13, 9). Another principal noted about teachers that "You want to hold them to high expectations, you want them to feel good about the place they attend and they work" (statements 12, 9). Participants in Factor B also discussed instructional goals and observing teachers as positive aspects of their leadership. These participants

considered themselves to have many responsibilities – to the school culture as a whole (vision, collegiality), to the staff (collaboration, assistance) and to instructional practices.

Factor B members attributed their low rankings for items based on negativity, specificity, and relative importance. “I think some of them just seemed to me to focus on what people aren’t doing well instead of what they are doing well, and to me that will effect your morale,” said one, echoing the Factor B trend that negative statements (28, 32) will hurt morale, which is a high positive concern for Factor B. Specificity also was a concern for the members of this group. “I felt these were run of the mill, mundane, not big picture,” said one principal, and another added, “some of it is the, kind of, I want to say nitty-gritty or specific.” They were “specific to one component rather than whole-school,” said another. The special education-based cards in the instructional leadership category (10, 3, 2, 4) fell into this specific category; the Factor B principals rated them low because they were focused on high-level, cultural and overarching concerns and not what was happening so much on the individual instructional level. They also said that some things were of more relative importance: “You know, if we have a good vision, a clear vision, we talk about values and beliefs, we’re doing well with instructional practices, keeping ourselves up to date and constantly trying to do better, then some of these other things will fall into place.” Principals in Factor B felt that their whole-school leadership would trickle down into improvements in more specific practices.

Factor B and Special Education

Qualitative data was collected during the interviews about the principals' perceptions of special education services in their buildings. The majority of principals in Factor B had a positive opinion of the outcomes for the special education students in their schools (79%). Twenty-one percent had a negative or mixed perception of the outcomes for special education students. Two of the principals with special education background and one principal without special education background had a negative response; the majority of both (five with special education experience, six without) reported a positive response.

The principals who spoke positively about their special education terms tended to do so in general terms, mentioning the commitment of staff, the number and availability of specialized programs and instructional techniques, or the quality of services offered in their schools. Two of the Factor B principals who reported negative responses also spoke in general terms, stating that the services were 'weak' or 'could be better,' while one cited MCAS results for their negative perception of the outcomes.

The participants in Factor B were also asked what the greatest help and the greatest obstacle were for their special education outcomes. Tables 4.14 and 4.15 show the results.

Table 4.14: Factor B Greatest Help in Special Education

Help	# Principals	%
Staff/Faculty	10	67%
Special Education Director	3	21%
Inclusionary Practices	1	7%

The members of Factor B believe that people are the greatest help for special education students, with staff/faculty and special education director accounting for 93% of responses.

Table 4.15: Factor B Greatest Obstacle in Special Education

Obstacle	# Principals	%
Resources/Budget	4	29%
Time/Scheduling	2	14%
Regular Education Teachers' Beliefs	2	14%
Advocates	1	7%
Training/Professional Development	1	7%
Lack of Leadership	1	7%
Lack of Educational Options	1	7%
Size of the Challenge	1	7%

The responses for greatest weakness were more spread out. Resources and time accounted for 43% of the responses, with the rest dispersed among building-specific items. One principal was very disillusioned with special education advocates, saying that they "consider their job to be, you know, we need to get as many specialized services as possible. I think I said earlier that over special education-ization, the over disability-ization of kids, has created, has enabled a generation of kids and families to kind of sit back and watch their education happen or expect someone to do it for them."

The principals with special education background were asked how they felt their special education background impacted their sorting of the cards. Table 4.16 shows the responses for the Factor B principals.

Table 4.16: Factor B Special Education Principals On How Their Background Impacted Their Sorts

I think it definitely helps. I had, I didn't work under my license for very long, it was only like a year as an inclusionary teacher, but some folks working in a public school just get that reputation as being good with difficult children so that's where I found myself for the next 15 years.
How great a factor? Actually I think quite a bit, because that background comes with understanding that people are human beings and they make mistakes, and they're not perfect, and they're all individual and every one of us looks at something individually, and just because I do something one way I can't expect everybody else to do it my way. Everyone has their own way to get to the end, it just, it doesn't necessarily have to matter. You know? I think my background is very much an understanding, respectful background. It's huge. It has a huge percent, probably 80, 90 percentage of how I sort of placed the cards.
I'm always conscious of it. I think, I try to move those initiatives forward. I try. I think special education, when you talk about special ed, you try to lead by example, you try to support by example, you try to do things by example and that can be a bit of a… you know, when people are asked to change, they don't want to change.
Well, considering that I lowered the special education model, not high actually. But I feel that special ed is an inherently broken system that prioritizes paperwork and compliance over what's best for students and that is challenging.
I think a larger factor was the ability to oversee the whole big picture of the school and what I believe needs to be in place in order to operate an effective and safe and consistent work environment.
So special ed is every part of me. That's all I know. And so therefore it's not… I'm in a different breed of principal. It's not a second thought, it's what I do. You're going to have to convince me of another way. Do you know what I mean? So therefore sometimes when I saw special ed it's something that's just part of it, so it actually, it's not part of the way I think of myself as a leader. It just happens.
I think it was key. I think my educational background has been a key. It's actually done two things. It's strengthened I think my instructional practices and it brings credibility as an education leader when I'm talking to teachers because I worked in an alternative high school where we had students with high anxiety and depression, couldn't function in the mainstream, and we also had students in the class that were reading at a third grade level. So back then we didn't have a lot of instructional techniques that would kind of, cookie-cutter, oh, this is what I do in this scenario, so I think it was developing differentiated instruction on the fly so the students could be successful. So when I come into, as a principal, and I'm working with teachers regarding differentiated instruction, you know, varied methodology and changing practice, I've been there and I understand their struggles and I think I can give them concrete answers to some of their, when they struggle or when they have some problems

A majority of the principals - five of the seven - with special education background in Factor A spoke positively about their special education background impacting their sorts. They spoke of their background impacting their interpersonal skills, their leadership, and their instructional practices and credibility with their teacher. The principals who answered positively came from the following types of special education backgrounds: two with a degree, previous experience, and certification; one with certification and previous employment; one with a degree and previous employment; and one with previous employment. One principal who did not speak positively rejected the entire special education model ("a broken system") and the other did not think of it as a "big picture" system and therefore unimportant, which is in keeping with the general Factor B trend to favor whole-school priorities. Those principals came from special education backgrounds of a degree, certification, and prior employment and of a degree only.

Factor B Summary

Factor B members tended to have more years in their current positions and of administrative experience overall. They were generally older, more educated (including all three participants with a doctoral degree), and had been predominantly secondary-level teachers. They were more ethnically diverse; all four participants of minority background were in Factor B. Factor B principals worked in schools with schools with a lower percentage of free and reduced lunch students, their special education populations had higher proficiency raters (including the highest overall score in both ELA and mathematics), they had lower accountability status, and a lower special education enrollment percentage. Factor B principals

valued statements from three leadership styles: distributed, instructional and transformational. They showed a preference for items that involved communicating with and supporting teachers, having a positive and collegial school environment, and articulating a vision to move the school forward. They gave low ratings to distributed, instructional, and transactional items that put special emphasis specifically on special education, were not proactive about school improvement, and that had a negative focus to leadership.

As revealed in their interviews, Factor B principals felt that communication, culture and teacher support were the main goals for their leadership. They prized setting a vision, maintaining morale, collaborating with teachers and being positive as essential to their leadership. They were not concerned with specific, nitty-gritty aspects of instruction or school management; they felt that by working on the cultural and collegial aspects of leadership they could best improve student outcomes. Factor B participants practiced diverse leadership, utilizing multiple leadership styles to help them pursue their leadership goals. They only category which they did not rate highly was transactional leadership.

Factor B members felt generally positive about their special education outcomes, with a large majority (79%) speaking in favor of their special education results. They largely felt that faculty, staff, and special education directors were the most significant help with their special education outcomes, but were diverse in what they felt was the largest obstacle. Five principals with special education background felt that their experiences had impacted their leadership shorts; two did not.

Similarities Among Factors A and B

Members of Factor A and Factor B both ranked Number 12 highly, as indicated above. Both Factor A and Factor B members ranked items 28 and 32 among their least representative statements. Both members felt that those items were negative, showed a laissez-faire attitude, and were not proactive in pursuing school improvement (See table 4.17).

Table 4.17: Similar Low Statements for Factors A and B

Low Item #	Statement	Factor A participant rationale	Factor B participant rationale
28	Show firm belief in "If it ain.'t broke, don.'t fix it."	• Basically, we're assuming that what we do is always perfect, and on point which were in the business where we should be constantly evaluating, reflecting, adjusting practice to better meet the needs of our learners. That can always improve, so much of what we do has changed. And when I said what we do in education, I'm talking about has changed over the last 5, 10 years its dare I say it's a little bit foolish if we just accept status quo is how I interpret that. • I think that is sort of a complacent attitude and I think we're always trying to move	• I think it's the least because if it isn't broke then you should make improvements. And I think that constant challenge of even when things are going good we can always do things better. When things are going great we should be able to make things excellent. And I think that for us at ---- High School that's kind of our focus, because it can be very easy to be complacent with good and then you never get to great. So that's why I think that complaining and that mentality, if it ain't broke then why are we fixing it, it's I think it's that constant push to always get better.

		things forward, and I think there's always room for improvement so to just leave something stagnant is not what I consider good leadership. • There's always things we can improve upon. That doesn't mean that we're constantly with initiatives or constantly with things in motion but, it's evaluating how could we have done it better, you know, what can we do. • I don't think that's the way to look at it, I think you can always improve. And so I never look at things as being great, just leave them alone. We always have to look at what he can do to be more exiting for kids and staff and we can always do better and better so I don't like that statement.	• Some things that may seem not broken are not effective. They don't support what's going on over here. And there's some things that need to be addressed and are being addressed that maybe are just part of a culture and nobody has the time or the energy, ooh, it takes too much time. But it's negative, or it doesn't produce anything, or why is it here, this is from the 50s and we're still, you know, kind of doing it.
32	Focus attention on irregularities, mistakes, exceptions, and deviations from the standards	• That's very negative. We try to focus on our successes and become more successful not focus, I mean we certainly look at our data and we see our points where we're not improving, but we look at what can we do. So the focus, we might	• It just felt negative and that wasn't the majority of the focus shouldn't be on the exception. You take that into consideration but you don't focus on it. • Negative talk doesn't really resonate well

		look at what we have been unsuccessful at, but the focus is on how do we improve it, not on the negative. • I don't like to focus attention on mistakes. I think we all make mistakes and the big thing is to learn from them and try to improve but I don't want to focus on all the negativity. I don't think it helps the morale and I don't think it helps improve. I really try to focus on the positive and focus on we need to, there are things we need to improve on and again develop a plan to be able to do that.	with people is my experience. You don't necessarily need to ignore and pretend and be Pollyanna, like everything's great, but to direct attention toward that is not really I think an effective way of getting people to be motivated.

Summary

The data collected for this study were analyzed using factor analysis to determine the presence of factors and the composition of the factors. Factor A was composed of 16 principals, eight with special education experience and eight without. Factor B was composed of 14 principals, seven with special education experience and seven without.

Factor A accounted for the majority of the variance and the members of that factor were younger, had less experience as administrators, had less education, had predominantly elementary-level teaching experience, worked in schools that had

lower results for their special education populations. They favored instructional and distributed leadership items that were linked to improving instruction and outcomes for students, improving teacher effectiveness, and meeting the needs of students. Factor B accounted for a smaller amount of the variance and tended to be older, more educated, with more experience in administration, had predominantly secondary-level teaching experience, and worked in schools with better special education outcomes. Factor B gave high rankings to items that involved communicating with and supporting teachers, having a positive and collegial school environment, and articulating a vision to move the school forward.

The qualitative data shows that Factor A members are focused on instruction and improving student outcomes. Statements such as "I believe that the bottom line is what's happening in that classroom and what instruction is being delivered by the teacher" and "this was all about instruction and how to we look at instruction" show that Factor A members believe that instructional leadership is the most important aspect of their role as principal. Factor A members also are cognizant that many of them are in poorly performing schools and that they need to improve their student outcomes, hence the focus on instruction.

Factor B members favor a diverse array of distributed, instructional and transformational leadership styles. They speak of 'big-picture' leadership, of focusing on morale, collaboration, and vision to inspire school-wide improvement. They don't want to give undue attention to "run of the mill, mundane, not big picture" leadership, preferring to focus on school culture and enhancing communication and collaboration with teachers.

Principals with special education in both factors were likely to credit their special education background with influencing their leadership, despite these principals landing equally in both factors. Even though principals with special education background did not show consistency in their leadership style as principals, they were likely to say that their special education background had an impact on their leadership.

CHAPTER 5

DISCUSSION

This section will explore an interpretation of the results from the q-sort and qualitative data collected about the leadership of Massachusetts principals with and without prior special education experience.

This study was based around the following research questions:

1. Are there clusters of participants who ranked the Q-Sort leadership statements similarly and differently?

2. Do the clusters relate to the principals who do and do not have a special education background, thereby connecting leadership to special education background?

3. Is there a difference in special education student outcomes for principals who do and do not have a special education background?

4. Do demographic and district variables have an effect on any of the above research questions?

The Effect of Special Education Background

This study intended to find if the special education background of the participants affected how they approached leadership when they became principals. That has shown not to be the case. There were two clusters of participants in the study who ranked the Q-sort statements differently and similarly, which have been referred to as Factor A and Factor B. Of the fifteen principals with special education background who participated in this study, eight were members of Factor A and seven were members of Factor B. In each factor, the principals were exactly half of

the members of the factor (eight of 16 for Factor A, seven of 14 for Factor B). These principals were asked how their special education background had affected their sorts, and the members or both factors answered similarly that, in most cases, their background had impacted their leadership. All principals, both with and without special education background, were asked what the greatest help and greatest obstacle to special education outcomes in their schools. Participants in both factors answered similarly, in both cases with the majority stating that faculty/staff was the greatest help and Time/Scheduling and Resources/Budget the greatest obstacle. Principals with special education background and principals without also had similar student outcome data. The MCAS scores and accountability status for the two populations were similar, which fits with the research of Wakeman et al. (2006), who found that principal knowledge of special education did not impact the AYP status of schools. The principals with special education background had the only two schools with special education enrollment percentage of 30% or greater, but both groups had large majorities in the 10 to 20% enrollment range. Special education background had no apparent affect on student outcomes or the factors and was not included as a component of the factor profiles. There is a dearth of research into the effect of academic background on leadership. Del Favero (2006) found that higher education administrators had differences in administrative behaviors based on their academic discipline background. It has also been found that different academic subjects tend to have different leadership structures in the public schools, with, for instance, teacher leaders being the typical structure the sciences while principal or assistant principal leadership being the norm for

literacy-related subjects (Spillane, 2005). DiPaola and Walther-Thomas (2003) argued that principals with strong expertise in special education would contribute to increased success for special education students. It has also been found in the literature that principals who had more special education knowledge were more involved with special education and more supportive of special education, with both attention and with resources (Wakeman et al, 2006). As measured by the variables collected by this study, there was no difference between the groups as measured by special education experience. None of subjects in this study mentioned special education litigation, which was one of the impacts that has been considered a telltale sign of a lack of special education knowledge (Davidson & Gooden, 2001). It may be that the principals who were not 'special education background' as defined by this study still had a high level of special education expertise, or it could be that the hypothesized impact of having special education expertise has been overstated in the literature.). Unlike Duncan (2010), who looked into specific special education knowledge domains (such as Understanding Law and Policy and Differentiating Instruction), this study only looked into leadership style. The true effect of special education background upon the principalship may come in terms of specific knowledge domains and competencies (Duncan, 2010; Christensen, 2009). However, this study did not bear out an effect of special education background on the leadership styles of the current participants. Demographic and district data had the only impact on the research questions.

Factor A Profile: Instructional-Distributed Leadership Oriented Principals

Factor A principals had a strong theme of instructional leadership running throughout their sorts and interviews. Instructional leaders focus on directly impacting the instruction and education of children through impact of first-order variables ((Hallinger 2003; Leithwood 1992). Instructional leaders practice such methods as goal-setting, improving instructional practices, and using data to improve student learning, often in direct response to state-mandated assessments (Prytula, Noonan, & Hellsten, 2013). Indeed, instructional leadership first came to the forefront of educational policy at the dawn of the modern age of accountability in education (Hallinger, 2003) and has continued to persist as a result of the need to improve student outcomes in an age of NCLB accountability, which has particular applicability to Factor A members as will be discussed in this section. Six of the top-rated statements for Factor A were instructional leadership statements. These statements emphasized observing teachers, instruction effectiveness, ensuring clear goals, evaluating curriculum, and having high expectations. These statements fit into the themes of instructional leadership put forth by Hallinger (2003, 2005) of managing the instructional program, defining the school's mission, and creating a positive climate. Managing the instructional program, where principals must supervise and evaluate instruction, oversee the evaluation of student progress, and coordinate the curriculum, fits the following sort items which were assigned high scores by members for Factor A: *#19, Systematically observe teachers' instructional methods; #10 Assist special educators on analyzing appropriate interventions; #24, Evaluate the curricular program.* The sort item *#12 Hold high expectations for staff*

performance fits into the category of defining the school's mission, wherein academic goals and expectations are set for the faculty. *#20, Help staff members improve their instructional effectiveness* is part of the category of creating a positive school climate, which includes professional development. Factor A members also rated highly for two distributed leadership items, reaffirming what Portin el al (2003) noted, that instructional leadership is too large of a task to do alone, and must be combined with some distributed leadership to make it approachable by a principal. As distributed leadership can add to the morale of a school (Sheppard et al., 2010), it is sensible that principals in lower-performing schools would include this leadership style to help in their efforts to increase student performance.

Factor A members also further stressed their commitment to instructional leadership during their interviews. "Systematically observing teachers and instructional methods that's going to support instruction… my belief is that the bottom line is that the teachers delivering the instruction is what's most important," said one participant. "The most important effect that we can have is teacher effectiveness, instructional strategies that will help kids. I mean, that's the secret!" added another.

The demographic information for Factor A sheds some light on why they might be so committed to instructional leadership. Only 2 of the principals worked in schools with the best accountability status, Level 1, while 10 were in Level 2 and three were in Level 3 schools, which were proportionally greater than the principals in Factor B. The MCAS outcomes for students with disabilities were lower for Factor A principals; they represented more schools with disabled students scoring below

20% proficient than did Factor B. The principals in Factor A were very clear in their interviews that the low-performing nature of their schools influenced their choice of leadership. “We are a school that is very underperforming so I’m really trying to get into classrooms and do walkthroughs and provide feedback for staff on how to improve their methods,” said one. “Well, like I said earlier we are a Level 3 district, and our scores are low because our high-needs students are underperforming. So I feel very strongly that we need to change our practices, change what we do, and we need to start thinking of how we teach all students here,” said another. Factor A principals were working with students who were not achieving and were taking an instructional focus to their leadership in an attempt to create improved outcomes for their students. It has been found that instructional leadership can create improved teacher self-efficacy, helping a faculty become a coherent team and improve student achievement (Calik, Segzin, Kavgaci, & Kilinc, 2012). Strong instructional leadership has also been associated with increased student achievement (Louis, Leithwood, Wahlstrom & Anderson, 2010). Factor A principals can thus be seen as at least somewhat responding appropriately to their challenges.

Factor A members also had specific demographics that can explain some of their leadership responses. Factor A members tended to be younger, less educated, and to have been in their current position for a smaller amount of time when compared to Factor B members. Mosely et al. (in press) found that principals in Vermont who fit all three of these demographic descriptors sorted transformational leadership items similarly. Tudryn (2012) found that special education leaders who were younger and had less experience sorted similarly for distributed leadership

statements, although he did not find that less higher education aligned with the age and current experience data points. Kabacoff & Stoffey (2012), in an investigation into age differences in leaders in business, found that younger leaders "bring an energizing presence, are open to change, and are focused on attaining results" (p.10). Age has been shown as a factor for leadership preference in private sector workers (Veccio & Boatwright, 2002). Factor A members also were more likely to have experience in elementary education, rather than secondary education. Cox (2006) found that elementary level administrators were more likely to desire fast, radical change than their secondary counterparts, which fits the with Factor A members' work in trying to reform low-performing schools. This agrees with other research indicating that principals in elementary schools tend to be more focused on curriculum and instructional leadership than principals in secondary schools (Grigsby, Schumacher, Decmen & Simieu, 2010). The Factor A profile also fits with previous findings that elementary principals are also more likely to show direct instructional leadership than secondary principals, since "elementary school teachers and principals characterize high-scoring principals that are effective instructional leaders as having a hands-on, direct role in instructional operations" (Louis et al, 2010, p. 87).

Factor B Transformational-Distributed-Instructional Principals

Factor B principals did not show one overriding leadership trait coming through in their sorts; rather, they showed that they valued traits from many different leadership styles. Factor B members valued distributed leadership (*#8, Support open communication*; *#9, Promote a professional collegial atmosphere*),

instructional leadership (*12, Hold high expectations for staff performance*; *#13, Engage teachers in formal and informal discussions of instruction as it impacts student achievement*; *#21, Involve staff in critical instructional decisions*), and transformational leadership (*#37, Articulate a compelling vision for the future*, *#43, Consider the moral and ethical consequences of decisions*, *#46, Tell stories to share important values*). This holds with the research stating that principals should move toward a balanced leadership style that does not rest on just one 'adjective' (Pepper, 2010; Webb, 2007). Coleman (2011) described "unhelpful mono-dimensional" leadership as limiting and not reflected in true practice, and called for differing leadership practices to be blended into a more accurate and helpful whole (p. 312).

The members of Factor B expressed fondness for many of these varying leadership styles in their interviews. The discussed communication (a component of distributed leadership), culture (a component of transformational leadership) and instructional goals (instructional leadership) while answering questions about their sorts. Collegiality was important to these teachers, with one principal describing is as a 'foundation' of principal leadership: "promote professional collegiality…. if you can take care of the foundation then everything else will hopefully start taking care of itself… inevitably it will help you with teaching and learning." Communication was a major priority as well. "Everything is an ongoing dialogue and so communication is critical, that's communication between teachers and students, students and their families, administrators and teachers," said one, while another added "I try to also model… open communication for staff. I want them communicating just as I communicate things with them." Another principal said that

"where the rubber meets the road" is in helping teachers improve their instruction, with another adding that having high instructions "is what gets students to the highest level." So, in contrast with Factor A, Factor B principals were still concerned with instructional leadership, but not as exclusively as the Factor A principals were.

Factor B principals were also concerned with more high-level, school-wide interventions, a trait of transformational leadership. Transformational leaders are "more concerned with the results than the process of how to get there" (Pepper, 2010, p. 46), and Factor B principals showed no enthusiasm for leadership that was "nitty-gritty or specific," as one put it. They wanted to focus on the "big picture," not on specific instructional techniques or interventions. Factor B principals fit into two of the principal leadership roles as set forth by Crane (2007) and Pepper (2010). These principals chose sort items and gave interview answers which fit into the Role Model category, where principals lead by example, facilitate shared leadership, and establish the school atmosphere. They also fit into the Leader role, where the principal is a visionary and facilitator, referenced by the transformational characteristics of the Factor B members. The third role, Manager, did not fit the Factor B members, as this involves the 'nitty-gritty' and transactional aspects of leadership, which Factor B members explicitly distanced themselves from and ranked low in their Q-sorts.

Demographic information for Factor B showed some insight into their leadership sorts as well. Factor B principals had been in their positions longer, were older, had more education (including all three principals with doctorates who participated in the study), were more ethnically diverse (including all four

participants of minority background who participated in the study), had predominantly secondary teaching backgrounds, and tended to work in schools with better accountability and standardized testing outcomes. Veteran principals have been shown to us a variety of leadership approaches, as do the principals in Factor B (Krajewski, Conner, Murray, & Williams, 2004). Mosley et al. (in press) also found that older principals had similar leadership sorts, while Tudryn (2012) also found that experienced and older educators sorted their leadership statements similarly. Those studies also found differences by ethnicity, but with very small sample sizes of diverse participants. It has been hypothesized that simply having the experience of an ethnically diverse background will impact leadership behaviors (Eagly & Chin, 2010). Kabacoff and Stoffey (2012) found that older leaders approached leadership differently than younger leaders in that they "bring a calmer, more considered approach" (p. 10) and focus more on developing staff. It has also been found that older leaders show more transformational leadership characteristics than do younger leaders, and that transformational leadership characteristics increase with an increase in level of education (Barbuto, Fritz, Matkin, & Marx, 2007). Years of experience have also been found to be a predictor of an increased level of leadership expertise (Avery et al., 2003). "Experts differ from novices in that they have a greater number of concepts available, organize information on the basis of identifying principles, and are capable of applying concepts in a flexible fashion contingent on key characteristics of the situation" (Mumford et al., 2000). The Factor B teachers have had the time in the position to engage in self-reflection and trial-and-error learning about leadership that the

principals in Factor A, due to their shorter tenures as principals, have not been able to engage with. This type of self-development of leaders increases leadership skills over the course of a leader's career (Reichard & Johnson, 2011). Since there is not one "single leadership style [that] has been shown to be correlated to successful school leadership" (Cox, 2006, p. 19) it fits with the high-achieving nature of these principals that they draw on many leadership styles within their high-performing schools. Cox also found that secondary-level administrators had distinct leadership from elementary leaders, as secondary leaders showed a greater affinity for slower, more measured and considered change than did elementary principals (2006). Secondary principals tend to delegate instructional leadership to department heads and other school leaders, focusing on other types of leadership (Grigsby et al., 2010). The Factor B focus on 'big picture' change fits with this measured, considered leadership from a predominantly secondary group.

Implications of the Research

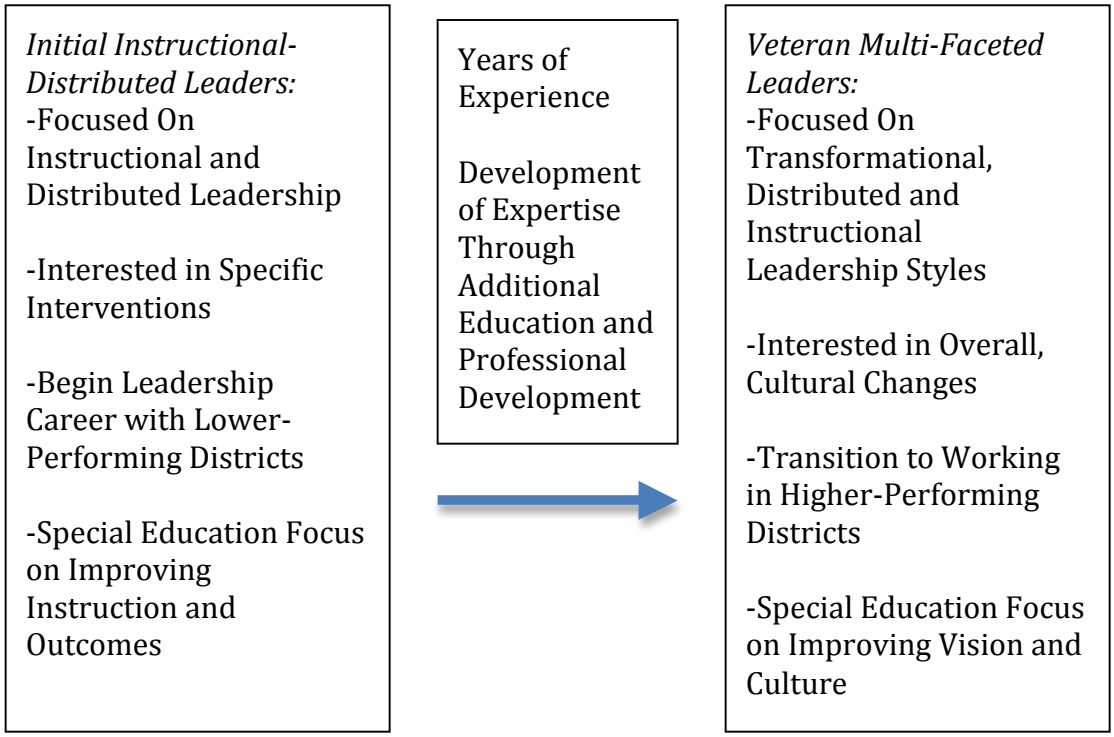
This research has shown that principals view their leadership differently based on several demographic and school-based variables: age, education, type of experience, and school achievement. Principals change their leadership as they gain experience and more expertise, demonstrating professional growth and improvement over the course of their career. There is not, however, much implication for alteration of policy based on this information, as it is hardly possible to inflate the effects of experience. That leadership styles change with education is important. If principals move to a more varied, transformational and higher-level leadership as they pursue professional development through education, it makes

the case that principals should continue to engage in life-long learning opportunities. Though it is not possible to confer experience on principals before it is earned, it may be possible to give an early advantage to newer principals by examining the educational experiences that more experienced principals have had. It is possible that undergraduate and masters' programs should look at what higher-level education programs are teaching about leadership and attempt to incorporate some of that material so that prospective principals can have the benefit of that involvement earlier in their careers.

This research also shows that special education background does not have a predictable effect on perceptions of leadership style. Principals who sorted into both factors believed that their special education experience had steered them towards perceiving particular leadership styles as more important. Principals did believe that leadership styles were adaptable to their situations. While research has pointed towards special education fulfilling leadership styles promoted by the IDEA and the laws and regulations around special education, perhaps more attention should be given to the flexibility that is required of special educators as a part of their careers.

Career Growth Model for Principal Leadership

Figure 5.1: Career Growth Model for Principal Leadership



The above model shows a career path for principals suggested by the research in this paper. In this model, principals begin their careers with the characteristics suggested by Factor A, as Initial Instructional-Distributed Leaders. They are in lower-performing schools and they are very involved in and concerned with specific interventions to improve student outcomes in these schools, including the students with disabilities who are on the lower-achieving end of the spectrum. They focus on instructional improvements to improve outcomes for special education students. They distribute leadership tasks as part of their work to

improve school outcomes and to keep morale high as they work towards school improvement. They possess the characteristics of early-career leaders, focusing on specific instructional leadership as a means to increase the student outcomes that are a priority in their generally lower-achieving schools (Barbuto et al., 2007).

As time passes, however, the leadership of these principals changes. They continue their professional growth and development and pursue more education, going from a master's-level to a master's plus 30 or a doctorate. They learn expertise and gain experience as they continue in the principal's role (Avery et al., 2003; Barbuto et al., 2007, Reichard & Johnson, 2011). Gradually, their profile changes to the final stage in this model, the box labeled Mature Multi-Faceted Leaders and representing the participants who grouped into Factor B.

In this stage, the principals have become veteran leaders. They have acquired advanced educations, experience, and expertise. As such, they have shifted their perceptions of leadership, drawing more on transformational and distributed leadership skills in addition to whole-school style instructional leadership (Mumford et al., 2000; Cox, 2006). They have come to elevate the importance of delegating the specific instructional goals, including those for special education, to qualified department chairs and are more concerned with the vision and overall progress of the school and special education. These principals are now working in higher-performing schools, either because they have stayed in the same schools since the beginning of their careers and have improved the culture and outcomes as they have progressed along their leadership paths, or because they have

transitioned to become new leaders in higher-performing schools where their experience and expertise are embraced.

This career-continuum model places the evidence gathered from the qualitative and quantitative data in this study as a natural part of the career path of an educational leader. Outcomes improve as principals gain expertise and become more comfortable drawing on a diverse set of leadership styles. Principals evolve over time, progressing from an initial Factor A viewpoint to a mature, effective Factor B outlook, and student outcomes, including those for students with disabilities, follow along with that progression.

Limitations of the Research

Q-methodology has several limits. The forced choice inherently limits the participant's role in expressing their own unique opinion (Bracken & Fischel, 2006). Many participants expressed a desire to place more statements in the positive section of the sort grid than were allowed by the parameters of the study.

Also, the participants in the study were not randomly chosen. Only principals who responded to emails and phone calls participated in the study. The results may have changed if participants were truly randomly selected. The requirement that half of the principals have special education background also limited the population of principals who were eligible for recruitment into the study. The study could have included more minority participants and more participants with advanced degrees to expand the diversity of thought.

The study did not discover any specific attributes for principals with special education background. The Q-sort items were able to discover differences in the

participants based on expertise, but were not developed in a way that was able to show the impact of special education background. A recreation of this study with different sort items, designed in a manner with more of a special education focus, could provide better answers to the question of how a background in special education impact the leadership of principals.

The study also has many strengths. It can be replicated with different populations of participants and with different leadership statements to suit an array of research goals. It featured large (for Q-methodology) sample size featuring an array of principals from rural, suburban and urban schools and from all different sections of Massachusetts, providing a truly state-wide perspective on principal leadership. The collection and analysis of both qualitative and quantitative data allowed for a full, rich picture of the leadership of the participants to be collated and studied.

Suggestions for Future Research

This study found that instructional-distributed leaders tended to work in lower-performing schools while multi-faceted leaders tended to work in higher performing schools. It also showed that most principals had been in their current position for less than five years. It would be interesting to determine if that is a direct result of principal search committees seeking out instructional leaders specifically to help turn around struggling schools, while schools which already have a track record of success are looking for more 'big picture' principals to continue that high achievement. This study also found that special education professionals tend to attribute their leadership to their special education experiences regardless

of what that leadership is; a study to determine what is different about special education experiences that allow people with a background which is perceived as 'common' to have such varied outcomes would be an important addition to this study. Also, a recreation of this study with different Q-sort items could provide better data showing potential commonalities in principals with special education background which this study was not able to discover. This study is also one of many that have found age and education as a factor in explaining differences in leadership style. A study to fully explore the causation of why this is consistently occurring would expand this vein of research.

Conclusions

Two factors emerged from the data collected for this study. Members of Factor A were generally less experienced, with less education, possessed an elementary level experience, were younger, and worked in schools that were lower-performing. Factor A members showed a strong preference for instructional leadership, which was consistent with prior research showing that elementary principals show strong instructional leadership attributes (Louis et al., 2010). This profile also concurs with prior research that younger leaders tend to have similar leadership characteristics that emphasize providing feedback to educators (Tudryn, 2012). Members of Factor B were generally more experienced, more highly educated, more ethnically diverse, older, possessed secondary-level experience, and worked in higher-performing schools. They favored a multi-faceted leadership style focusing on the 'big picture' of a school and on transformational leadership, which is characteristic of older and more educated leaders (Barbuto et al., 2007).

Special education background was not a component of constructing the two factors. However, the principals with special education background tended to credit this background with informing their leadership tendencies. While the data showed that other demographic variables – age, education, type of prior experience – accounted for the variability in leadership, this appears to be a contradiction. Leaders stated that their special education background impacted their leadership, and yet the factor analysis showed this not to be the case. Further research should be considered to resolve this paradox.

This study had both strengths and limitations. The strengths were: the size of the study, the geographic diversity of the participants, the ability to replicate the study for further research, and the collection of both qualitative and quantitative data. The participants were selected nonrandomly, but all were qualified Massachusetts principals, 50% of whom fit the narrow criteria for being a principal with special education background. However, many participants expressed a desire to place more statements in the positive section of the sort grid than were allowed by the parameters of the study.

The career growth model for leadership shows a path for growth in expertise and changes in leadership for principals over the course of their careers. Principals start their careers focused on specific instructional leadership and in lower-performing schools. As time goes by, principals develop their expertise through more advanced education and additional years of experience; now older, they have transitioned to more diverse, culture-focused leadership and have moved on to work in higher-performing schools.

In summary, this study did not resolve the question of whether special education background has an impact on principal leadership. It did provide valuable information on demographic and school variables that do account for variability in leadership styles and developing a model to explain how expertise developed over time can account for these changes in principal leadership. Principals can, and must, continue to improve their practice over the course of their careers and ensure that their leadership maximized results for all children, including those with disabilities.

APPENDIX

INSTRUMENTATION

Q-Sort Consent Form
Special Education and Principal Leadership Study

Thank you very much for your participation in this study. Your contributions will both help the researcher complete a doctoral dissertation and add to the current understanding of principal leadership. Your time and perspective are invaluable and much appreciated.

What Will Happen During the Study

You will be asked to sort forty cards with different leadership statements printed on them. You will also be asked to fill out short questionnaires before and after the sort. The entire process should take 45-60 minutes.

Who To Go To With Questions

The Principal Investigator listed below should be contacted with any questions. Questions can also be answered during the sort.

Protection of Privacy

Should you consent to participate in this study, your privacy will be protected as follows: your name, the name of your school, and the name of your district will not be used. Code numbers will be used instead of personally identifying information. The code key linking individuals with information will be kept secure by the researcher and destroyed at the completion of the study. Any and all other information provided by you for the study may be utilized by the researcher.

Risks and Discomforts

There are no risks to the participants in this study. Your participation is voluntary and all information will be confidential and secure.

Your Rights

You have the right to withdraw your consent for participation in this study at any time. There are no repercussions for participating, not participating, or withdrawing from this study.

Sincerely,
Rob Schulze, M.Ed, CAGS, Principal Investigator
413-686-0950
rschulze@educ.umass.edu

Dissertation Chair:
Mary Lynn Boscardin, 413 545-3610
Affairs:
mlbosco@educ.umass.edu

Graduate Program Director and
Associate Dean for Academic

Linda Griffin, 413-545-0236
lgriffin@educ.umass.edu

Consent to Participate in Study

I have had the opportunity to review the relevant information on this study and my participation in it. I have had the opportunity to review the consent form and ask questions, and to have my questions answered to my satisfaction. I understand that my consent is required in order to participate in the study.

T**op of Form**

☐ **I Agree / ☐ I <u>Do Not</u> Agree (please check one) to participate in this study.**

Participant's Signature_____ Date_____

Participant's Printed Name:_____

Special Education and Principal Leadership Study
Participant Background Information Questionnaire

Name: _____

Gender: ❒ Male ❒ Female

Years in Current Position: ❒ Less than Five Years ❒ Five Years or More

Years of Administrative Experience: ❒ Less than Five Years
❒ Five to 10 Years
❒ More than 10 Years

Years of Teaching Experience ❒ Less than Five Years ❒ Five Years or More

Age: ❒ 20-30 ❒ 31-40 ❒ 41-50 ❒ 51-60 ❒ 61-70 ❒ 71-80

Do you have any prior special education background? ❒ Yes ❒ No

If yes, what sort of special education background do you have?
❒ A degree in special education (Bachelor's, Master's, CAGS, doctorate)
❒ Certification (currently or in the past) as a special educator or related service provider
❒ Previous employment as a special educator or related service provider in a public school

What is the highest level of education you have attained?
❒ Master ❒ Master +30 ❒ Doctorate

Please check all that apply to your teaching history.
❒ Elementary ❒ Secondary ❒ Both elementary and secondary
❒ General education only ❒ Special education only ❒ General and special education

Ethnicity:
❒ African American ❒ Asian ❒ Hispanic/Latino ❒ Multi-race, Non-Hispanic

❒ Native American ❒ Native Hawaiian or Other Pacific Islander ❒ White

Post-Sort Questionnaire

Name:_____

1. Briefly describe what went into your choices of statements that are "most representative of my leadership?"(+5's).
Please list at least one number of a statement in the +5 column and your reasons for placing it there.

2. Briefly describe what went into your choices of statements that are "least representative of my leadership?" (-5's).
Please list at least one number of a statement in the -5 column and your reasons for placing it there.

3. If there were other specific statements that you had difficulty placing, *please list the number of the statements and describe your dilemma.*

4. What other issues/thoughts emerged for you while sorting the cards?

5. Describe how you arrived at your overall most important statements of your leadership.

6. Describe how you arrived at your overall least important statements of your leadership.

7. How great a factor was your special education background or lack thereof in placing the statements? *Please give specific examples for each if applicable*.

8. How do you feel about the outcomes for special education students in your school?

9. What is the biggest help you have with special education outcomes?

10. What is the biggest obstacle?

11. Do special education staff regularly participate in your building-level meetings?

Q-Sort Statements

Ensure there are well-functioning special education leadership teams (Hulpia, Devos, & Rosseel, 2009)

Ensure members of the special education teams have clear goals (Hulpia, Devos, & Rosseel, 2009)

Ensure members of special education teams have clear roles and responsibilities (Hulpia, Devos, & Rosseel, 2009)

Ensure members of the special education teams prioritize tasks they have to perform (Hulpia, Devos, & Rosseel, 2009)

Ensure the special education team supports the district goals (Militello & Janson, 2007)

Understand that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members (Militello & Jans0n, 2007)

Provide educators with time to address the most important needs of students with disabilities (Militello & Janson, 2007)

Support open communication (Militello & Janson, 2007)

Promote a professional collegial atmosphere (Militello & Janson, 2007)

Assist special educators on analyzing appropriate interventions (Militello & Janson, 2007)

Collaborate with teachers on professional development. (Militello & Janson, 2007)

Hold high expectations for staff performance. (Heck & Marcoulides, 1993)

Engage teachers in formal and informal discussions of instruction as it impacts student achievement. (Heck & Marcoulides, 1993)

Communicate instructional goals. (Heck & Marcoulides, 1993)

Encourage discussion of instructional goals. (Heck & Marcoulides, 1993)

Maintain high faculty morale. (Heck & Marcoulides, 1993)

Establish an orderly environment for learning. (Heck & Marcoulides, 1993)

Develop school goals. (Heck & Marcoulides, 1993)

Systematically observe teachers' instructional methods. (Heck & Marcoulides, 1993)

Help staff members improve their instructional effectiveness. (Heck & Marcoulides, 1993)

Involve staff in critical instructional decisions. (Heck & Marcoulides, 1993)

Report academic progress to the community. (Heck & Marcoulides, 1993)

Secure resources necessary to support the instructional program. (Heck & Marcoulides, 1993)

Evaluate the curricular program. (Heck & Marcoulides, 1993)

Provide others with assistance in exchange for their efforts. (Bass, 1985)

Discuss in specific terms who is responsible for achieving performance targets. (Bass, 1985)

Make clear what staff can expect to receive when performance goals are achieved. (Bass, 1985)

Show firm belief in "If it ain.'t broke, don.'t fix it." (Bass, 1985)

Ensure that behavior is predictable and consistent. (Bolman & Deal, 2008)

Direct attention toward failures to meet standards. (Bass, 1985)

Express satisfaction when others meet expectations. (Bass, 1985)
Focus attention on irregularities, mistakes, exceptions, and deviations from the standards. (Bass, 1985)
Maximize staff performance using formal roles and responsibilities. (Bolman & Deal, 2008)
Concentrate attention on dealing with complaints. (Bass, 1985)
Talk optimistically about the future. (Bass, 1985)
Talk enthusiastically about what needs to be accomplished. (Bass, 1985)
Articulate a compelling vision of the future. (Bass, 1985)
Express confidence that goals will be achieved. (Bass, 1985)
Talk about the most important values and beliefs. (Bass, 1985)
Specify the importance of having a strong sense of purpose. (Bass, 1985)
Consider an individual as having different needs, abilities, and aspirations from others. (Bass, 1985)
Help others to develop their strengths. (Bass, 1985)
Consider the moral and ethical consequence of decisions. (Bass, 1985)
Use symbols (metaphors, ceremonies) to develop meaning for staff. (Bolman & Deal, 2008)
Serve as a role model for staff to emulate. (Bolman & Deal, 2008)
Tell stories to share important values. (Bolman & Deal, 2008)
Develop school culture over time. (Bolman & Deal, 2008)

District Background Information

District Enrollment: ❒<3000 ❒ >3000
School Enrollment: ❒<350 ❒>350
Per Pupil Expenditure, General Education: ❒<13,500 ❒>13,500
Per Pupil Expenditure, Special Education: ❒<13,500 ❒>13,500
Students Identified as Free and Reduced Lunch: ❒ ≤ 10%, ❒ 10% to 20%, ❒ 20% to 30%, ❒ 30% to 40%, ❒ 40% to 50%, ❒ 50% to 60%, ❒ 60% to 70%, ❒ 70% to 80%, ❒ ≥ 80%
Student Achievement/AYP Schools:

- ❒ II1/2-S: Identified for Improvement - Subgroups only (Year 1 or 2)
- ❒ II1/2-A: Identified for Improvement (Year 1 or 2)
- ❒ CA-S: Identified for Corrective Action - Subgroups only
- ❒ CA-A: Identified for Corrective Action
- ❒ RST1/2-S: Identified for Restructuring - Subgroups only (Year 1 or 2)
- ❒ RST1/2: Identified for Restructuring (Year 1 or 2)
- ❒ UR: Under Review

Special Education Enrollment Percentages: ❒<10% ❒10-20% ❒21-30% ❒>30%
Free and Reduced Lunch: ❒ ≤ 10%, ❒ 10% to 20%, ❒ 20% to 30%, ❒ 30% to 40%, ❒ 40% to 50%, ❒ 50% to 60%, ❒ 60% to 70%, ❒ 70% to 80%, ❒ ≥ 80%
Special Education MCAS Proficiency ELA:❒ ≤ 10%, ❒ 10% to 20%, ❒ 20% to 30%, ❒ 30% to 40%, ❒ 40% to 50%, ❒ 50% to 60%, ❒ 60% to 70%, ❒ 70% to 80%, ❒ ≥ 80%
Special Education MCAS Proficiency Math: ❒ ≤ 10%, ❒ 10% to 20%, ❒ 20% to 30%, ❒ 30% to 40%, ❒ 40% to 50%, ❒ 50% to 60%, ❒ 60% to 70%, ❒ 70% to 80%, ❒ ≥ 80%

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